TS Series Owner's Handbook.

ASTRA

HOLDEN

www.holden.com.au

Owner's Name ....
Address ....
Town ....
State........................Postcode ....

Model Name ....
Reg. No.........................Eng. No. ....
Odometer Reading ....
Date of Purchase ....

(17 character I.S.O.V.I.N.) Vehicle Identification Number

Vehicle Identification Certificate

Selling Retailer's
Stamp & Signature ....

Holden Ltd, ABN 84 006 893 232 (hereinafter Holden).

Change of name, address or ownership

In the event of a Safety Recall, or for various reasons, Holden may need to contact you as the owner of this car. Also, if less than three years old, this car will qualify for Roadside Assistance, refer to Chapter 9. If you have recently changed your address, or name, or purchased this car second-hand, please help us to help you by taking a few minutes to fill in and mail the form on the third page of this handbook. For information about Holden's privacy policy, please visit Holden's website at www.holden.com.au.

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Part No. 92159056, April 2003
Astra, TS MY03 print 8, incl turbo & convertible

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We thank you for choosing Holden and want to assure you of our continuing interest in your motoring pleasure and satisfaction and compliment you on your choice.

This handbook applies to all the current Astra models. Therefore, due to different models and options, you may find reference in this Handbook to some equipment not installed in your own vehicle.

Please note that all information, illustrations and specifications in this Handbook are based on the latest production information available at the time of printing. Holden reserves the right to make changes at any time without notice and without incurring any obligation.

CHANGE OF ADDRESS OR OWNERSHIP

Please fill in the form below if you have changed your name, address, bought the vehicle second-hand, or have become the new driver. Holden requires these details in order to contact the operator in the event of a safety recall and to keep the initial 3 year Roadside Assistance details up to date (refer to Chapter 9). For information about Holden's privacy policy, please visit Holden's website at *www.holden.com.au.*

Please mail to the address on the back of this page.

Please tick the appropriate box:

☐ Original Owner ☐ Subsequent Owner

Title: (Mr, Mrs, Miss, Ms, etc.)

First name in full or initials

Surname or Name of Company/Institution/Government Department

Address

Street/box

City/Town

State

Postcode

1st contact phone no

2nd contact phone no

Email address

Vehicle registration number

Holden number, if fitted (Refer to Chapter 8)

ISOVIN Number (Refer to Chapter 8)

Place in an envelope and mail to:

The Manager - Warranty Administration
Service Department
Holden Limited
Box 548D, G.P.O.
Melbourne
Victoria, 3001

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CHAPTER 1

Dashboard

The following page illustrates the dashboard, identifying and locating each function; page numbers refer you to each item.

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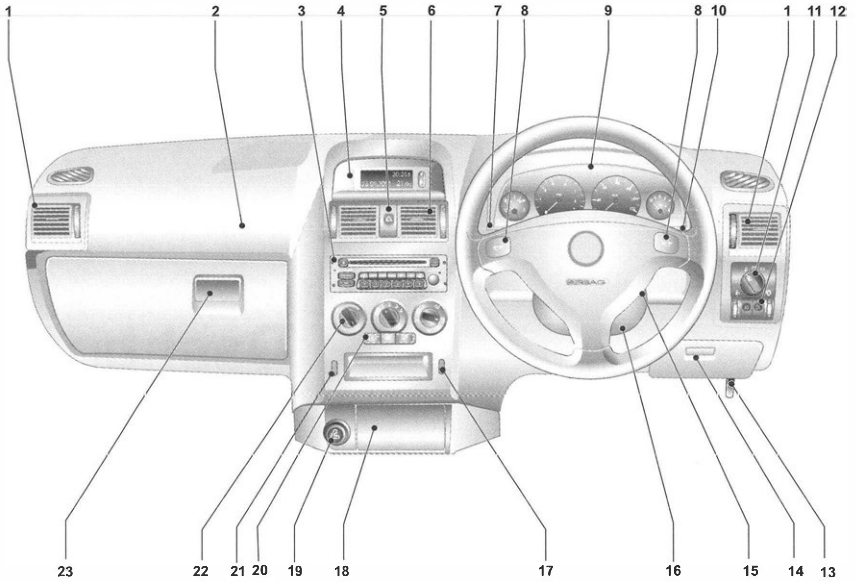
DASHBOARD LAYOUT



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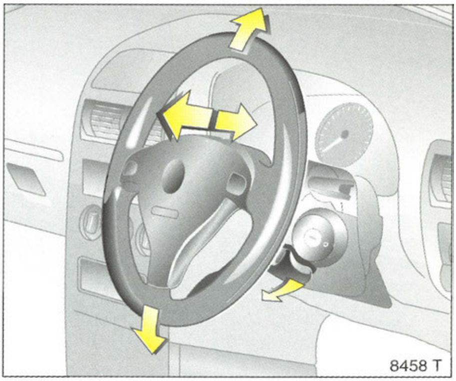
TILT STEERING AND HORN

Tilt / reach steering

The lock lever is located directly beneath the ignition lock.

Move the lock lever downwards to adjust the height and reach of the steering wheel.

Push the lock lever upwards to set the adjustment, ensuring the lever clicks into position. Jiggle the steering wheel to ensure it has locked securely, before driving.

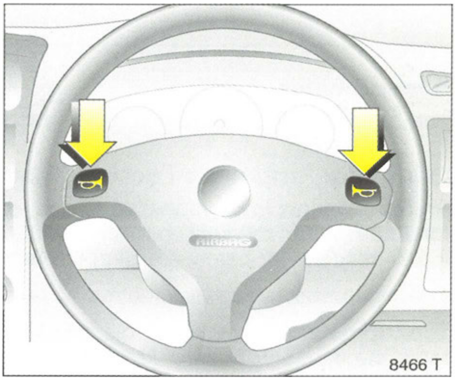


WARNING:

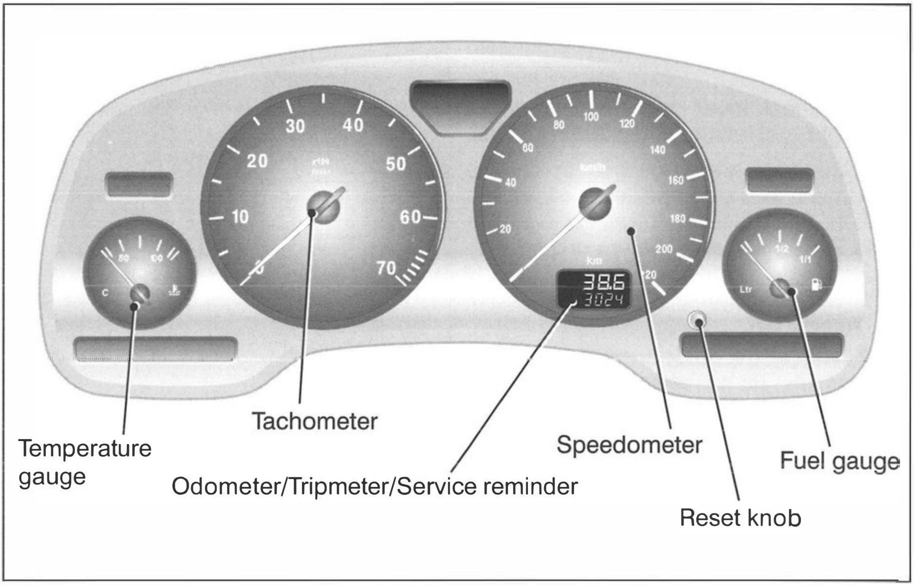
As with all the other driver position controls, do not attempt to adjust the steering wheel while driving.

Horn

The horn is activated by pressing the 📯 symbol, on either side of the steering wheel.



GAUGES



Speedometer

The speedometer indicates vehicle speed in kilometres per hour (km/h).

Odometer / tripmeter / service reminder

A small window in the speedometer is used for the odometer, tripmeter, and service reminder. When the ignition is off, the odometer and the tripmeter can be displayed for a few seconds by briefly pressing the reset knob.

The **odometer** records kilometres travelled since the vehicle was built.

The **tripmeter** (above the odometer) records kilometres travelled on a particular trip. To reset the tripmeter to zero, press the reset knob when the ignition is on.

The **service reminder** (InSP) displays for a few seconds when the engine is started only if the vehicle is within 500 km or one week of the next service. Refer to Chapter 12 for servicing.

Tachometer

The tachometer indicates engine speed in revolutions per minute (r.p.m.).

Note: Operation of the engine in the warning (red) zone may cause serious engine damage.

Time display in odometer

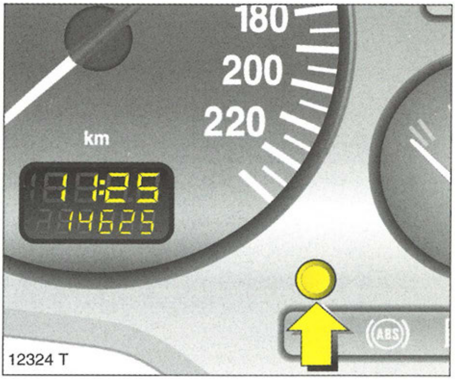
To switch between the tripmeter and the time display, press the reset knob.

When the vehicle lights are on, adjust the brightness of the display by using the right-hand knurled knob below the light switch.

GAUGES cont.

Setting the time

- Press the reset knob for approximately 2 seconds.
- The hours flash.
- Press the reset knob briefly to set the hours.
- Press the reset knob for approximately 2 seconds.
- The minutes flash.
- Press the reset knob briefly to set the minutes.
- Press the reset knob for approximately 2 seconds.
- The clock starts at 0 seconds.



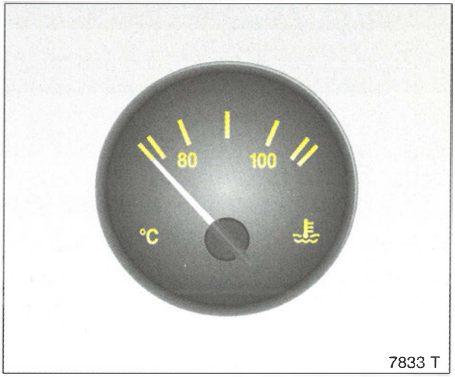
Engine temperature gauge

If the pointer is to the left of the 80 mark, the engine is not yet at operating temperature.

If the pointer is between the 80 and 100 marks, the engine is at normal operating temperature.

If the pointer moves to the right of the 100 mark the engine temperature is too high. If this occurs, stop the vehicle as soon as it is safe to do so and turn off the engine. Refer to Chapter 6 for further information.

The engine temperature gauge shows the coolant temperature only if the coolant level is adequate. Refer to Chapter 7 for information about checking the coolant level.



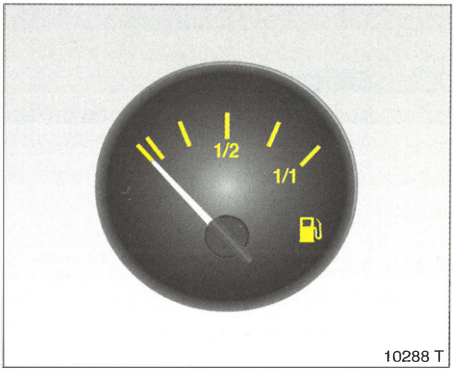
Fuel gauge

Refer to Chapter 8 for the fuel tank capacity.

Add fuel to the fuel tank before the pointer enters the far left or when the fuel symbol illuminates.

If the fuel symbol flashers, fuel should be added to the tank immediately. Refer to Chapter 5.

Note: Never let the tank become empty; this can cause damage to the catalytic converter.



WARNING / REMINDER LIGHTS

Sports drive (automatic transmission only)

Illuminates for a few seconds when the ignition is switched on and when 'sports drive' is selected. The transmission then changes gears at higher engine speeds, refer to Chapter 4.

Battery

Illuminates when the ignition is switched on. Goes out when the engine is started and engine speed is increased above idle speed.

If it illuminates during driving, the battery is not being charged (engine cooling may also be affected). Have the system checked at a Holden Retailer as soon as possible.

Brakes, hydraulic clutch

Illuminates for a few seconds when the ignition is switched on. It will go out after a few seconds unless the park brake is applied and / or the brake / clutch fluid levels are low.

If it lights during driving and the park brake is *not* applied you should stop the vehicle as soon as possible and consult a Holden Retailer.

Check engine

Your vehicle is fitted with an Electronic Engine Management System. The check engine symbol indicates when system service is required. The symbol lights when the ignition is switched on and goes out shortly after the engine starts to run. If the symbol lights up when driving, service to the Engine Management System may be required. Although the vehicle may still be drivable and not require towing, see your Holden Retailer as soon as possible, as continued driving could affect fuel consumption, engine performance or may damage the catalytic converter.

However, if the symbol flashes and the engine cannot be started, turn the ignition off for at least 2 seconds before attempting to start the engine again.

Emissions

Your vehicle is fitted with an emission monitoring system. The emission warning symbol indicates when system service is required. The symbol lights when the ignition is switched on and goes out shortly after the engine starts to run.

If the symbol lights up when driving, service to the emission system may be required. Although the vehicle may still be drivable and not require towing, see your Holden Retailer as soon as possible.

However, if the symbol flashes while driving, reduce speed until the light stops flashing and take the vehicle to a Holden Retailer as soon as possible.

WARNING / REMINDER LIGHTS cont.

Low Fuel

Lights up when the fuel gauge enters the red zone and comes on earlier when driving around bends. If the light flashes, the fuel is just about to run out.

High beam

Lights up when the headlight high beams are in use or flashed.

Oil pressure

Lights up when the ignition is switched on and goes out after the engine is started. It can light up intermittently when idling if the engine is hot, but must go out when engine speed is increased.

If it illuminates during driving, immediately stop the vehicle and switch off the engine. Check the engine oil level. Do not drive with this light showing. If the oil level is normal, have the system checked at your nearest Holden Retailer.

Rear fog light

Lights up when the rear fog light is switched on.

Front fog lights

Lights up when the front fog lights are switched on.

Turn signal indicators

Flash when the turn signal lights are on. If the symbol flashes rapidly, a turn signal light bulb may have failed.

ABS: anti-lock brake system

Lights up for a few seconds when the ignition is switched on. If it does not go out or if it comes on during driving, there is a defect in the Anti-lock Brake System (ABS). The brake system remains operational but without ABS assistance, refer to Chapter 4. You should consult your Holden Retailer as soon as possible.

Traction control / electronic stability program

Lights up for a few seconds when the ignition is switched on and goes out when the system has performed a self-test. Refer to Chapter 4.

WARNING / REMINDER LIGHTS cont.

Airbag and seat belt pretensioners

Lights up for a few seconds when the ignition is switched on. If it does not go out or if it comes on during driving, there is a defect in the airbag / seat belt pretensioner system and they may not function correctly, especially in an accident. You should consult your Holden Retailer as soon as possible.

Engine cooling (if fitted)

Lights up for a few seconds when the ignition is switched on. If it lights up during driving, a fault has occurred in the engine cooling system or the air conditioning system (if fitted). The coolant level should be checked immediately, refer to Chapter 6. If the coolant level is normal, have the system checked at your nearest Holden Retailer.

Seat belt

The seat belt warning light displays for a short time when the ignition is first switched on. This warning is designed to remind occupants to fasten their seat belts.

Automatic headlight range adjustment

Lights up for a few seconds when the ignition is switched on. If it lights up when driving, a fault has occurred. Consult your Holden Retailer

WIPERS AND WASHERS

Wipers and washers

The lever on the right of the steering wheel column controls the windscreen wipers when the ignition key is turned to on.

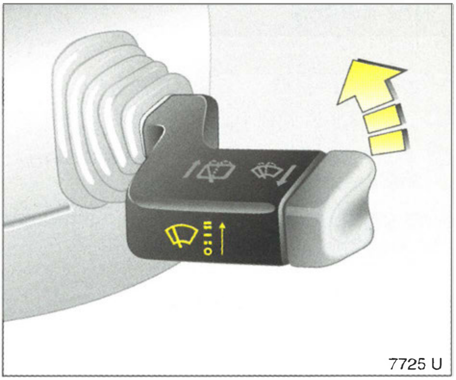
= fast

— slow

- - intermittent

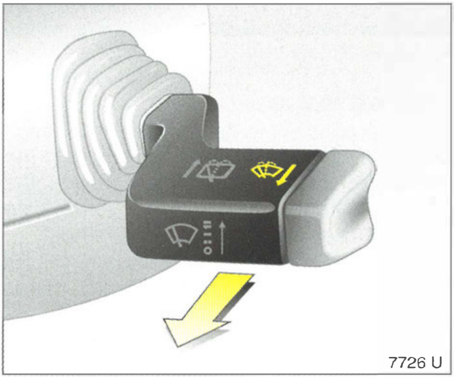
O off

Never operate the wipers on dry glass, as this will damage the rubber and scratch the glass.



Windscreen washer

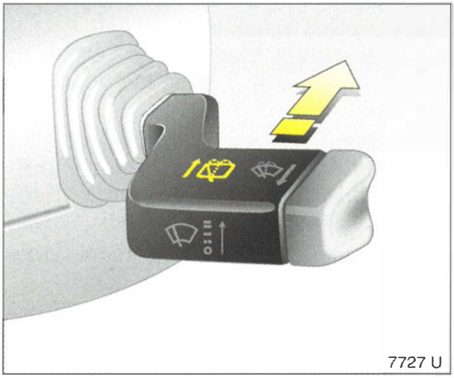
Never operate the wipers on dry glass, as this will damage the wiper rubbers. To spray washer fluid onto the windscreen pull the lever toward you. At the same time, the wipers are operated for several sweeps.



Hatch model tailgate washer

Push the lever away from you to the first stop position to turn on the rear wiper. In this position, the rear wiper operates at an intermittent speed. To turn on the rear washer, push the lever further and hold it for as long as required. In this position, the rear wiper operates continuously while the rear washer is operating.

When the lever is returned to the first stop position, the rear wiper operates at an intermittent speed.



EXTERIOR LIGHTS

Light switch

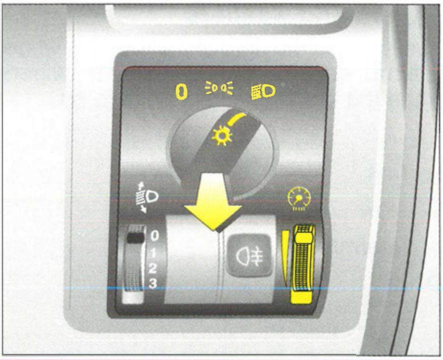
O off

⊃○⊂ parking lights

≣D headlights and parking lights

☼ pull the light switch outwards to turn on the interior light

Turn the thumb wheel to adjust instrument illumination.



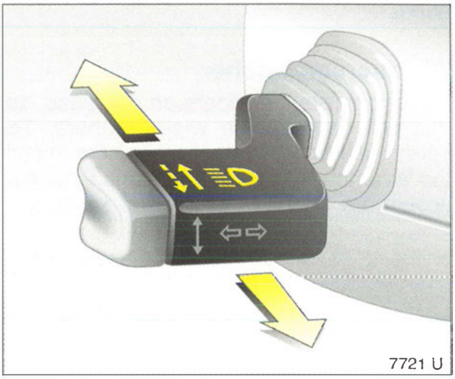
High / low beam

When the headlights are switched on, push the lever away from you until you feel a click, then release. The headlights will change from low beam to high beam. Pull the lever back towards the steering wheel to return to low beam. When high beam is in use, a symbol (≣D) on the instrument panel will light up.

It is also possible to flash the lights on high beam for signalling purposes (even if the headlights are turned off) by pulling the lever towards you. The lights remain on high beam as long as the lever is held.

Leaving the headlights switched on without the engine running will eventually flatten the battery.

A warning chime will remind you to switch off the headlights when leaving the vehicle.

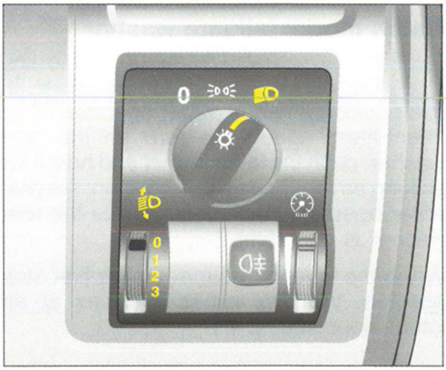


Headlight range adjustment

The headlight range may be adjusted to suit the current load in the vehicle by selecting 0, 1, 2 or 3 when the headlights are on.

Depending on the vehicle configuration the headlamp adjusting range may be extremely small between some settings of the headlamp range adjusting wheel.

Correct adjustment of the headlight range reduces dazzle for other road users.



0 = Front seats occupied

1 = All seats occupied

2 = All seats occupied and load in the luggage compartment

3 = Driver's seat occupied and load in the luggage compartment

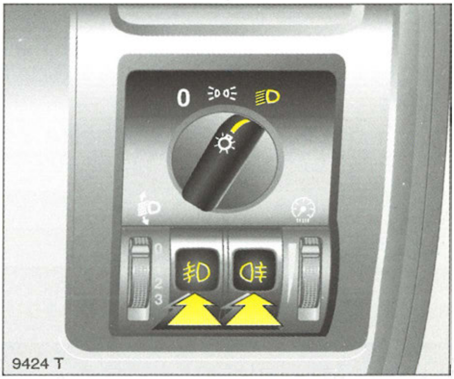
EXTERIOR LIGHTS cont.

Rear fog light

The push button for the rear fog light is the right hand side button located below the headlight switch.

Push the button to switch the fog lights on or off. The symbol in the instrument panel lights up when the fog light is switched on.

Check your State's laws regarding the use of fog lights when driving.



Front fog lights

The push button for the fog lights is the left hand side button located below the headlight switch.

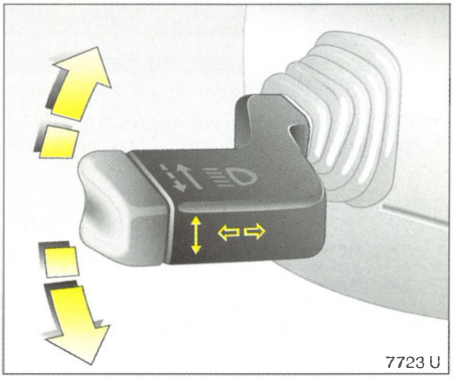
Push the button to switch the fog lights on or off. The symbol in the instrument panel lights up when the fog lights are switched on.

Turn signals

Push the lever up or down (as required) to signal a turn.

In some turns, such as changing lanes, the steering wheel is not turned far enough to cancel the turn signal. So, to indicate a lane change, move the lever part way and hold. The lever will return to the neutral position when released.

To signal a turn, push the lever up to indicate a left turn and down to indicate a right turn.



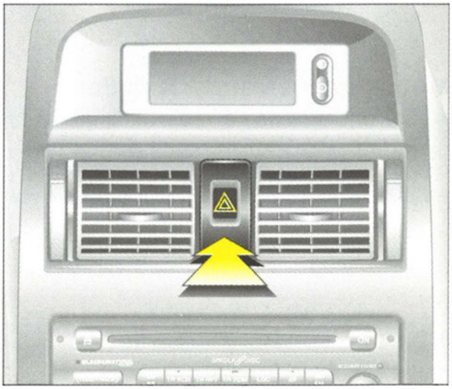
Hazard

The hazard light switch is located between the two centre face level vents on the dash. Push the button to switch the hazard lights on or off.

Use the hazard warning flasher to warn other drivers if your vehicle becomes a traffic hazard, day or night.

When the hazard warning system is on, the hazard button symbol flashes, in unison with the external turn signals.

Use of the hazard warning flashers while the vehicle is moving is illegal in some States.



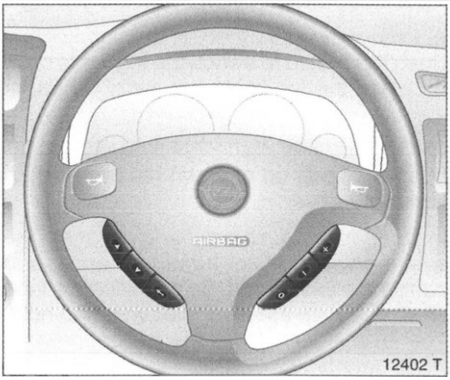
RADIO

Radio

The radio will stay on until the key is removed from the ignition. Therefore, remember to remove the key when leaving the vehicle for any length of time, or you may flatten the battery.

Refer to the audio leaflet for operating instructions about your radio.

Radio controls in the steering wheel (if fitted)



On the left-hand side:

- ▶ Station search forward (radio)
  Next track select (CD)
- ◀ Station search backward (radio)
  Previous track select (CD)
- ➜ Preset radio stations search (radio)
  Reset CD to beginning (CD)

On the right-hand side:

- + Increases volume
- − Decreases volume
- **0** Changes between radio and CD

Mobile phones and CB radios

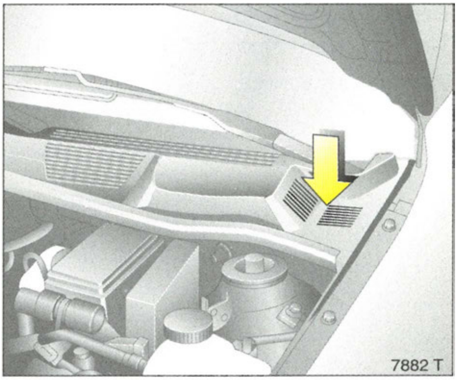
Mobile phones and CB radio equipment which use an integrated antenna may temporarily affect the vehicle's electronics when used inside the vehicle, due to the interference created when transmitting. Therefore, only mobile phones and CB equipment that use an antenna fitted to the outside of the vehicle should be used.

VENTILATION AND HEATING

Air intake

The vehicle features a flow through ventilation system for your comfort. Under reasonable conditions, it should not be necessary to open the windows at any time.

Outside air is drawn into the vehicle through the opening at the base of the windscreen. Do not allow this opening to become clogged with debris, such as leaves or snow.



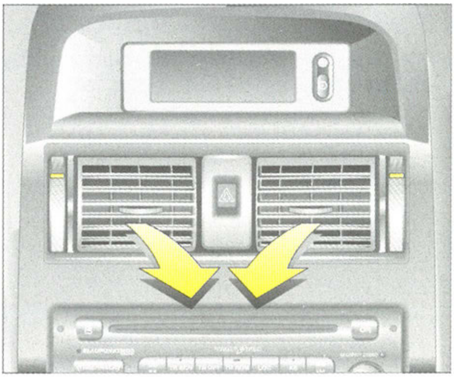
Fresh air filter

The fresh air filter cleans the air entering from outside and filters dust, soot, pollen and spores from the interior air if the air recirculation system is active.

The filter must be replaced at the intervals specified in Chapter 12, Servicing.

The demist and foot vents are not adjustable as they direct air to the windscreen, windows or feet in the best possible way.

However, the face level vents (in the centre and side of the dash panel) are adjustable. They can be swivelled and tilted as required. They can also be completely shut off by turning the wheel next to the vent to **O** position.



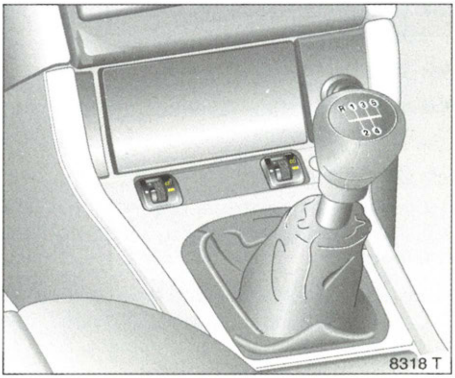
Heated front seats (if fitted)

Two rotary switches ♨ are located beneath the ashtray and are used to operate the front seat heating.

To operate, turn the appropriate rotary switch ♨ to the required heat setting.

To switch the heating off, turn the rotary switch ♨ to the '–' (off) position.

The control indicator that identifies when the seat is being heated is located next to the rotary switch.

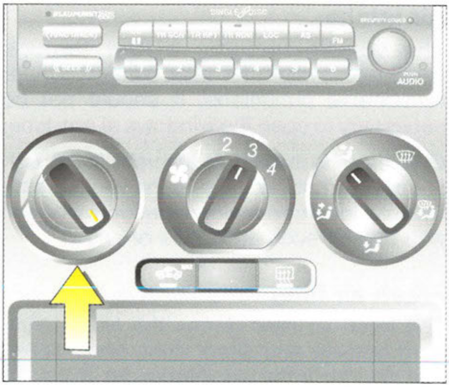


VENTILATION AND HEATING cont.

Temperature dial

Anticlockwise = cool.

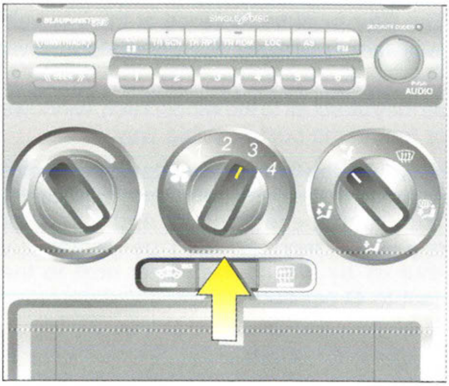
Clockwise = warm.



Fan dial

Off plus four fan speeds are provided.

Note: The rate of air flow is determined by vehicle speed, as well as by the fan.



Vent dial

air from the demist vents

air from the demist and the front and rear foot vents

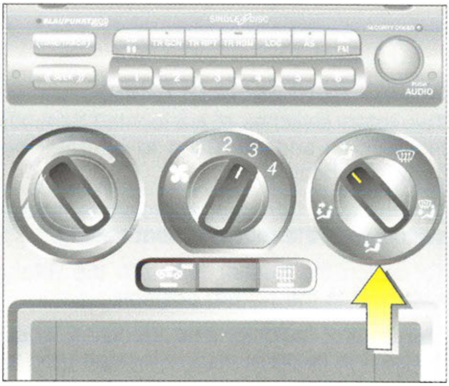
air from the front and rear foot vents.

air from the face level and the front and rear foot vents

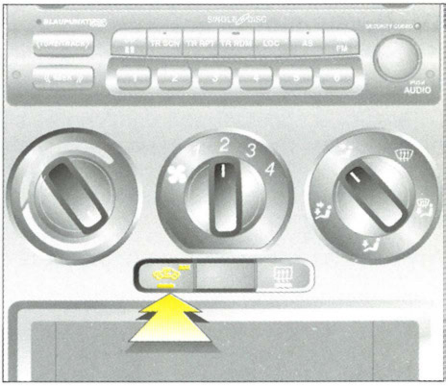
air from the face level vents.

To provide for individual requirements, the switch can be set to any intermediate position.

Note: Air will come from the face level vents with all vent dial positions, provided the vents are open.



VENTILATION AND HEATING cont.



Air intake button

Push the button to switch between recirculated and outside air. The light in the switch glows when recirculate is selected.

When following another vehicle on dusty roads, or to prevent exhaust fumes or odours entering your vehicle, press the button to the recirculation position (the light in the switch lights up). However, when driving on unsealed roads but where the dust is not airborne, press the button to the fresh position. All windows must be closed and the fan preferably on a high speed so that positive air pressure in the vehicle will help prevent dust being sucked in.

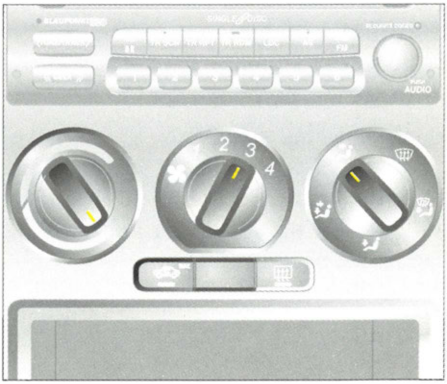
Recirculate reuses interior air and is therefore not recommended for long periods of time. If occupants are smoking, it is recommended that the recirculate position not be used, as the tobacco smoke adheres to the air ducts and will produce stale smelling air.

Heating

- air conditioning switch off (if fitted)
- air intake button to fresh air
- temperature dial as required
- fan as required, but not full speed
- vents dial to foot level vents.

Note: Heat will not be available until the engine warms up. Therefore, keep the vents closed until the engine has warmed up, then direct the vents towards the side windows (if required) to aid demisting.

Ventilation without using air conditioning



To conserve fuel when air does not require cooling.

- air conditioning switch off (if fitted)
- air intake button to fresh air
- turn temperature dial to cold
- fan speed as required
- set the vents dial to face level vents
- open all vents.

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted)

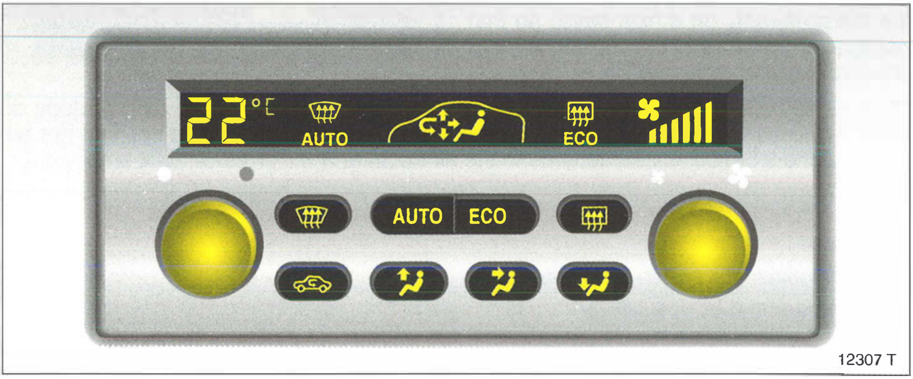
Electronic climate control

The system provides maximum comfort in any weather, at any outside temperature and during any season.

To ensure a constant and comfortable climate in the vehicle, the temperature of the inflowing air, the air-flow rate and the air distribution are changed automatically according to climatic conditions outside the vehicle.
Temperature changes due to external influences, such as direct sunlight, are automatically compensated.

When the air conditioner is on, the air is cooled and dehumidified.

When no cooling or drying is required, press the ECO button to save fuel.



When set to automatic mode, the electronic climate control system provides the optimum settings under almost all conditions. If necessary, the system can be influenced manually.

The electronic climate control system is only fully operational when the engine is running.

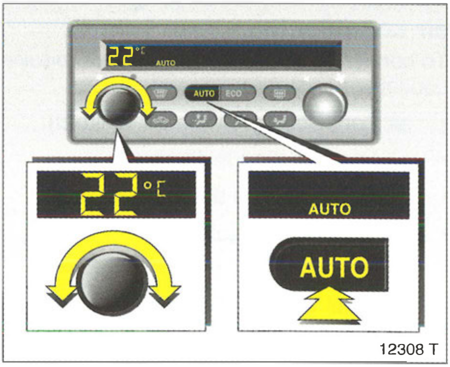
At low outside temperatures the air conditioner switches off automatically.

Automatic mode

Basic setting for maximum comfort:

- Press the **AUTO** button.
- Open all the air vents.
- Set the temperature to 22°C with the turn knob.

If necessary, the preselected temperature can be set higher or lower.



ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Preselected temperatures

The preselected temperature can be adjusted to values between 16°C and 28°C using the left-hand rotary switch.

For the sake of comfort, only change the preselected temperature in small steps.

If a temperature below 16°C is set, **LO** appears in the display: the electronic climate control system constantly runs with maximum cooling. The temperature is not regulated.

If a temperature above 28°C is set, **HI** appears in the display: the electronic climate control system constantly runs with maximum heating. The temperature is not regulated.

The preset temperature setting is retained when the ignition is switched off.

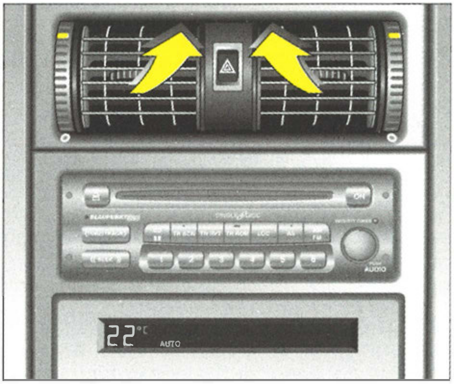
Air vents

All air vents are controlled automatically in automatic mode. The air vents should therefore always be open: turn the knurled wheels upwards.

The air vents are located to the left and right of the instrument panel and above the radio.

The air flow can be directed as desired by tilting and swivelling the slats.

Additional air outlets are located in front of the windscreen, in front of the door windows and in the front and rear foot wells.



Manual settings

Under certain circumstances (e.g. iced or misted windows) the functions of the electronic climate control system can be influenced manually. Manual settings are stored when the ignition is switched off. Make manual settings when necessary as follows:

Window demisting and de-icing

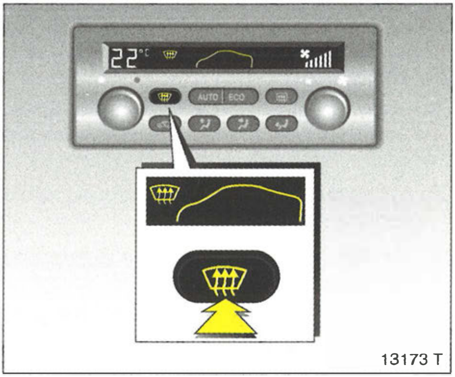
WARNING:

Disregard of the settings described can cause the windows to become misted up which can lead to accidents due to lack of proper vision.

To activate the window demisting and de-icing, press the ♨ button. The ♨ indicator in the display lights up.

The temperature, air distribution and fan are set automatically. Windows are quickly demisted and de-iced.

To return to automatic mode, press ♨ or **AUTO**.



13173 T

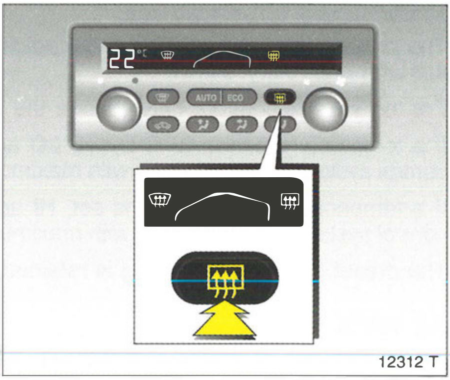
ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Heated rear window and heated exterior mirrors (if fitted)

To activate the heated rear window and heated exterior mirrors, press the button. The appear on the display. This system will only operate with the engine running.

The rear window and exterior mirrors will quickly be cleared of ice and condensation.

The heating is switched off automatically after approximately 15 minutes. To switch it off before that time, press the button again.



12312 T

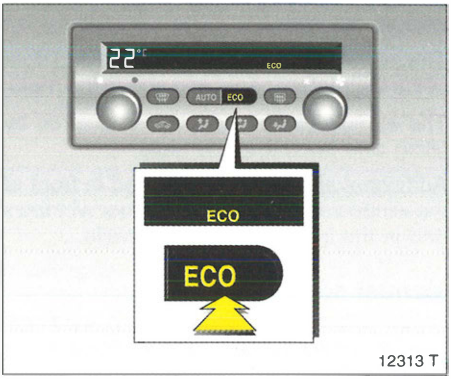
Operation without cooling

To activate this system without cooling, press the **ECO** button. **ECO** will appear on the display.

In this mode, the air conditioner is switched off enabling your vehicle to travel more economically.

The inflowing air will be neither cooled nor dehumidified. This restricts the level of comfort provided by the electronic climate control system, which may cause the windows to mist up.

To return to cooling, press the **ECO** button.



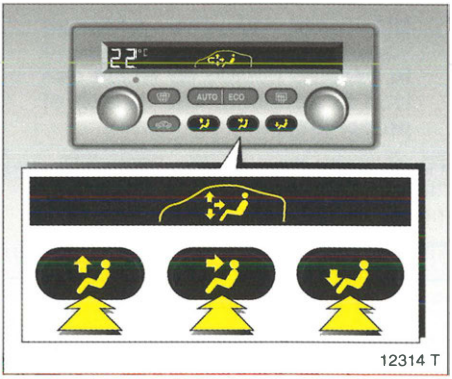
12313 T

Air distribution

Press one or more of the following buttons. The corresponding symbol appears on the display.

- Air distribution to the windscreen and front side windows.
- Air distribution to the vehicle occupants via adjustable air vents.
- Air distribution to the front and rear foot area.

To return to automatic mode, press the appropriate button again, or press **AUTO**.



12314 T

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

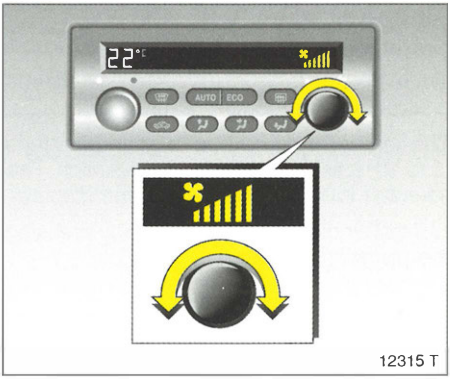
Air flow

Turn the right-hand turn switch clockwise or anticlockwise. The air flow is increased or reduced as appropriate. The selected fan speed is displayed by a bar indicator.

To switch off the fan, turn the right-hand turn switch anticlockwise as far as it will go. The fan and the electronic climate control system are switched off. The display read-out disappears.

To switch on the fan, turn the right-hand switch clockwise.

To return to automatic mode, press the **AUTO** button.



12315 T

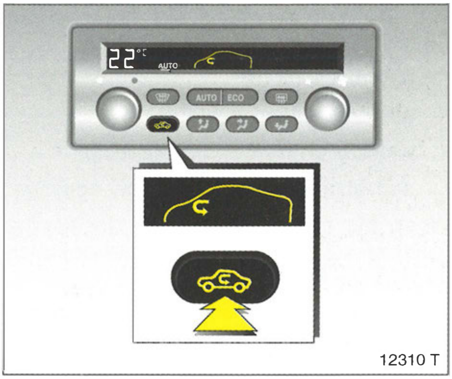
Air recirculation system

The air recirculation system prevents the entry of outside air. The air in the passenger compartment is recirculated.

Pressing the 🚗 button the ↺ symbol to appear on the display.

The exchange of fresh air is reduced in air recirculation mode. The quality of the passenger compartment air deteriorates which may cause the vehicle occupants to feel drowsy. In operation without cooling, the air humidity increases, so the windows may mist up. Consequently, the air recirculation system should only be run for short periods of time.

To switch off the air recirculation, press the 🚗 button again.



12310 T

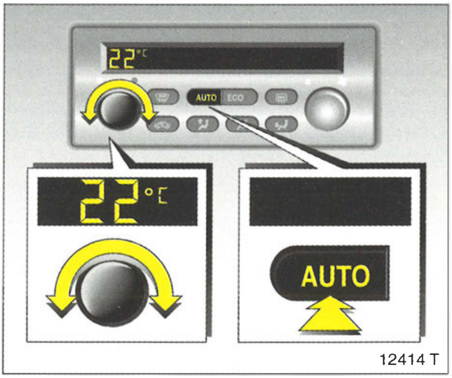
Air conditioning with the engine not running

When the vehicle is stopped and the ignition is off, the heating or cooling power still in the system can be used to condition the passenger compartment.

Press **AUTO** with the ignition off. The preselected temperature appears on the display. The temperature can be adjusted with the left-hand turn switch.

Air conditioning operates for a period of 10 seconds.

To deactivate air conditioning, press the **AUTO** button.



12414 T

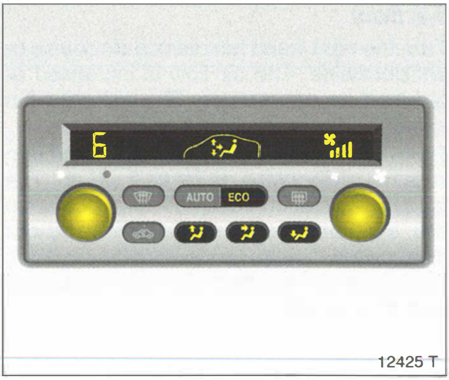
ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

Air conditioning with the convertible roof open

When the roof is down the electronic climate control system function is disabled.

The temperature can be adjusted in steps (0 to 10) using the left-hand turn switch. The selected level is indicated on the display.

Control air distribution manually by pressing the preferred button.



12425 T

Adjust the air flow with the right-hand turn switch. The selected fan speed is indicated on the display.

The following functions are not possible when the convertible roof is open:

- automatic mode
- air recirculation system
- window demisting and de-icing
- activation of the rear window demister.

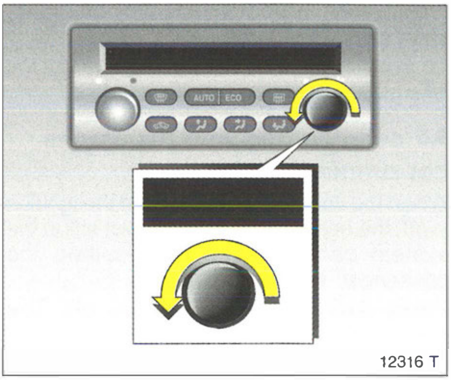
When the convertible roof is closed, the electronic climate control system operates as previously described.

Switching off the electronic air conditioning system

Turn the right-hand turn switch clockwise as far as it will go. The display read-out disappears.

The air distribution setting remains at the position last selected.

To switch on the electronic climate control system, press the **AUTO** button or turn the right-hand turn switch clockwise.



12316 T

ELECTRONIC CLIMATE CONTROL SYSTEM (if fitted) cont.

General information

If the windscreen mists up during damp weather, set the electronic climate control system as described in Window demisting and de-icing, in this Chapter.

The electronic climate control system functions most efficiently when the windows are closed. If the passenger compartment has heated up considerably after a long period in direct sunlight, briefly open the windows so that the heated air can quickly escape.

For trouble-free operation of the electronic climate control system, do not cover the sensor between the air vents in front of the windscreen.

Maintenance

To ensure continuously efficient performance of the electronic climate control system, it must be switched on once a month for a few minutes, irrespective of the weather and time of year (with the air conditioner operational).

If a fault occurs in the electronic climate control system, consult a Holden Retailer.

AIR CONDITIONING (if fitted)

Air conditioning not only cools the air but also removes moisture. If the temperature dial is moved away from extreme cold, the air will be reheated before entering the cabin.

The air conditioner is switched on by pushing the ❄ button. A light in the switch lights up when the air conditioner is operating. The fan automatically runs at low speed, which can be increased if required.

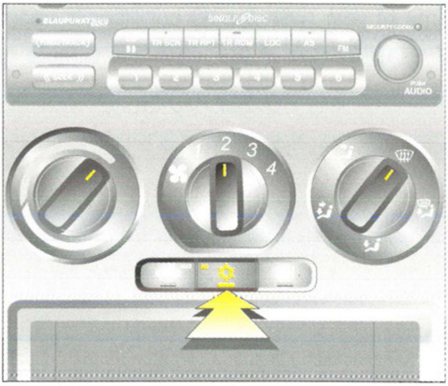
The air conditioning system operates only in the temperature ranges in which it is required; it switches off automatically when the outside temperature is below + 4°C.

To conserve fuel, switch off the air conditioning in cold weather. However, once a month (with the engine running) switch the air conditioner on for 5 to 10 minutes, even in Winter. This lubricates the air conditioning system.

At least one vent must be open when the air conditioning is on, so that the evaporator does not ice up due to a lack of air movement.

Normal cooling

- Air conditioning switch on
- Air intake button in the fresh air position
- Turn the temperature dial to cold
- Fan speed as required
- Set the vents dial to face level vents
- Open all vents.



Maximum cooling in hot weather or when the vehicle has been left in the sun

Open the windows briefly so that warm air can escape quickly.

- Air conditioning switch on
- Air intake button in the recirculate position
- Turn the temperature dial to cold
- Fan to the highest speed
- Set the vents dial to face level vents
- Open all vents.

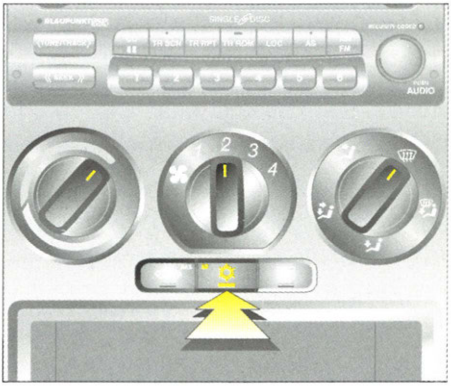
DO NOT leave recirculation on for too long as no outside air is drawn into the vehicle; passenger compartment air is recirculated and may become stale.

DEMISTING

Windscreen demisting

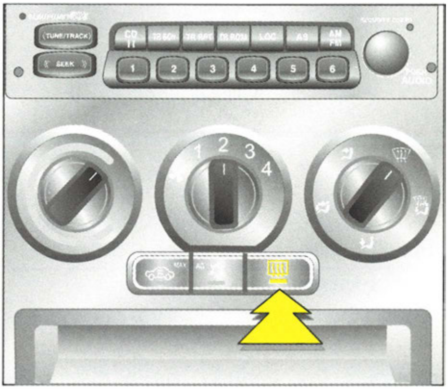
- Air conditioning switch on
- Air intake button to fresh

  Note: Air intake will automatically switch from recirculation to fresh air when the vents dial is rotated to demist mode.
- Temperature dial to hot
- Fan to speed 2 or more
- Vents dial to demist or demist and foot level vents
- Close all dash vents.



Rear window and exterior mirrors (electric mirrors if fitted)

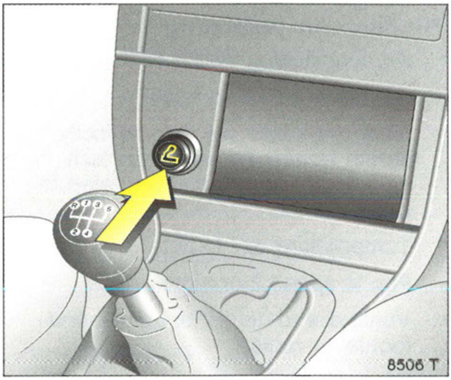
- Press the switch to turn demisting on or off
- Demisting is provided for the rear window as well as (on some models) the outside mirrors
- A light in the switch glows when demisting is operating
- Demisting operates when the ignition is ON
- Demisting will automatically switch off after approximately 15 minutes.



ASHTRAYS AND CIGARETTE LIGHTER

Cigarette lighter

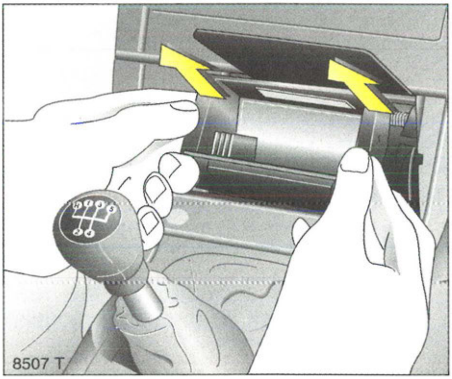
The cigarette lighter operates when the ignition is switched on. Push the cigarette lighter inwards to heat. The lighter automatically pops out when it is ready to use.



Front ashtray

The ashtray cover opens when pressed at the top.

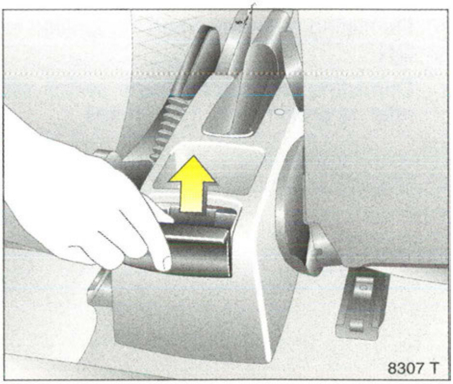
To empty the ashtray, grip both sides of the ashtray insert and pull upwards.



Rear ashtray

To open the ashtray, swivel the cover to the rear.

To empty the ashtray, open the cover halfway. Pull the ashtray upwards by its cover, tilting the ashtray slightly forwards as you do so.



INFORMATION DISPLAY (if fitted)

The display shows time, date and outside temperature when the ignition is on. When the radio is playing the date display is replaced by the radio display.

As with the instrument lighting, the brightness of the display can be adjusted when the park lights or head lights are on, by turning the thumb wheel. The thumb wheel is located below the head light switch.

When the ignition is off, the display can be illuminated for approximately 15 seconds by briefly pressing one of the buttons next to the display.

11:25
21.5°c
25.09.2001

Adjusting the date / time

- Turn on the ignition and switch off the radio.
- Press the top button for approximately 2 seconds (the day starts flashing).

  Press the bottom button until the day is correct.
- Press the top button (the month start flashing).

  Press the bottom button until the month is correct.
- Press the top button (the year start flashing).

  Press the bottom button until the year is correct.
- Press the top button (the hours start flashing).

  Press the bottom button until the hour is correct.
- Press the top button (the minutes start flashing).

  Press the bottom button until the minute is correct.
- Press the top button.

  The clock starts at 0 seconds.

To set the time only, repeatedly press the top button until the hours and the minutes flash. Adjust as above

Outside temperature

A fall in temperature is indicated immediately and a rise in temperature after a time delay.

WARNING:

The road surface may already be icy even though the display indicates a few degrees above 0°C.

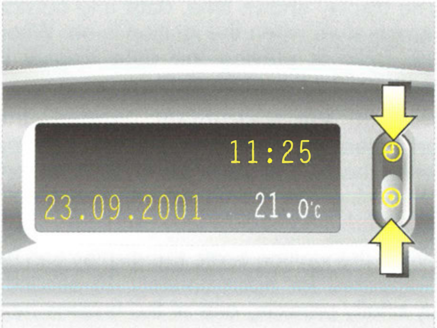
To warn the driver that the road surface may be icy, the display changes automatically to a ❄ symbol when the temperature drops to 3°C or below. When the outside temperature increases, the ❄ symbol does not disappear from the display until the temperature reaches 5°C.

MULTI-INFORMATION DISPLAY (if fitted)

When the ignition is on the display provides information about:

- time
- radio or date
- outside temperature
- check control
- trip computer functions.

When the park lights or headlights are switched on, the brightness of the display can be adjusted with the right-hand thumb wheel below the headlight switch.



When the ignition is off, the time, date and outside temperature can be displayed for approximately 15 seconds by briefly pressing one of the two buttons next to the display or the button on the wiper stalk.

Date and time

The date is displayed when the radio is switched off and the ignition is on.

To adjust the date and time turn the ignition on and switch off the radio. Press the buttons above the display as follows:

- Press ◷ for approximately 2 seconds (the day flashes).
  Press ⊙ button until the day is correct.
- Press ◷ (the month flashes).
  Press ⊙ button until the month is correct.
- Press ◷ (the year flashes).
  Press ⊙ button until the year is correct.
- Press ◷ (the hour flashes).
  Press ⊙ button until the hour is correct.
- Press ◷ (the minute flashes).
  Press ⊙ until the minute is correct.
- Press ◷
  The clock starts at 0 seconds.

If only the time is to be set, hold down the ◷ for at least 2 seconds, then repeatedly press the ◷ until the hours and minutes flash. Adjust as above.

Fault display

An 'F' in the display indicates a fault. The function in question is not working properly and you should contact a Holden Retailer.

Interruption of power supply

If the battery has been reconnected or charged, or the battery voltage has dropped to a low level, the multi-information display will be affected:

- Previously stored trip data will be lost.
- The date and time will need to be reset. Refer to 'Date and time' above.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Check control

The check control monitors:

- fluid levels
- front disc brake pad thickness
- the functioning of the automatic transmission (if fitted)
- important exterior light bulbs, including the wiring and fuses. A bulb is not checked until it is switched on.

When the ignition is switched on, the control functions are all checked. If the monitored control functions are OK, **BRAKELIGHT CHECK** is displayed.

The 'brakelight check' warning goes out after the brake pedal has been pressed once.

If a fault is found, a warning appears on the display. If there are several fault warnings, they are displayed one after the other.

Coolant
level
11:25
23.09.2001
21.0°c

Check control fault warnings:

ENGINE OIL LEVEL	Engine oil level is too low, check immediately. The engine oil level should be checked weekly, refer to Chapter 7.
COOLANT LEVEL	Coolant level in the expansion tank is too low. Top up the coolant, refer to Chapter 7. Consult a Holden Retailer.
AUTOMATIC GEARBOX	A fault has been found in the automatic transmission and it will no longer shift automatically. Change gears manually, refer to Chapter 4. Consult a Holden Retailer.
BRAKE PAD	Front disc brake pads worn down to minimum thickness. Consult a Holden Retailer to have the brake pads replaced.
BRAKE LAMP FUSE	Fuse for the brake light bulb is defective, refer to Chapter 6. However, a new fuse should only be installed after the cause of the troublehas been fixed.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Check control fault warnings, (continued)

BRAKE LIGHT	Brake light bulb failure, refer to Chapter 6.
HEADLIGHT TAIL LIGHT	Headlight or tail light bulb failure, refer to Chapter 7.
WASHER FLUID LEVEL	Fluid level in the windscreen washer system is too low, refer to Chapter 6.

If a fault is detected, the display for the trip computer will be taken over by the display for the fault until the fault is acknowledged by pressing the **S** or **R** button on the wiper lever. If several fault warnings are displayed, they must be acknowledged one after the other.

Once a fault warning has been acknowledged, it no longer appears on the display. The display is then available for the trip computer.

The following three fault warnings, reappear 15 minutes after they have been acknowledged.

- **BRAKE LIGHT**
- **BRAKE LAMP FUSE**
- **HEADLIGHT TAIL LAMP**

After the ignition has been switched off and switched on again, the stored fault warnings appear on the display one after the other. Once the faults have been remedied, the fault warnings are automatically wiped clear.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer

The trip computer provides the information about the following functions:

- Instantaneous fuel consumption.
- Average fuel consumption.
- Absolute fuel consumption.
- Average speed.
- Trip distance.
- Range (distance to empty).
- Stop watch.
- Outside temperature.

Some of the functions appear on the display in an abbreviated form.

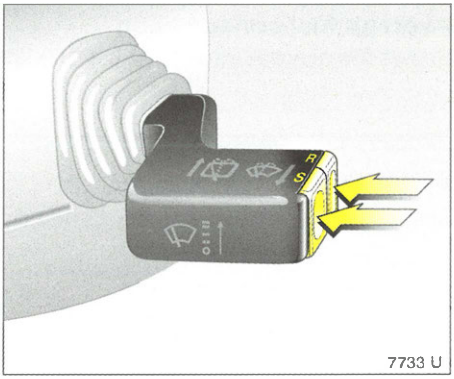
Distance
187 km
11:25
23.09.2001
21.0°c

If the check control system (see previous pages) has detected a fault when the ignition is switched on, the trip computer display will be taken over by the check control system; bringing the fault to the driver's attention.

The trip computer is operated by two buttons on the wiper lever:

Button S - Select: Moves the display to the next function.

Button R - Reset: Press the button for one second to reset the screen that is open at that time. Press for at least two seconds to reset all trip computer screens.



The trip computer can be reset at any time, however the following suggestions maybe useful:

- At each tank refill. The trip computer will then give you calculations that are averaged out over each tank of fuel.
- At the beginning of a trip. This might involve many tank refills and calculations will then be computed over the total journey.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer continued

When reset, the following windows will be cleared:

- average fuel consumption
- absolute fuel consumption
- average speed
- trip distance.

Instantaneous fuel consumption is not reset.

Instantaneous fuel consumption

The display changes depending on the vehicle speed.

Display in litres per hour below 13 km/h.

Display in litres per 100 km above 13 km/h.

Display 0.01 litres per 100 km with overrun cut-off, refer to Chapter 5.

Average fuel consumption

Shows the average litres used per 100 km since the trip computer was reset.

Absolute fuel consumption

Shows the total litres of fuel consumed since the trip computer was reset.

Average speed

Shows the average speed in km/h (while the ignition was on) since the trip computer was reset.

Distance

Shows the number of kilometres travelled since the trip computer was reset.

MULTI-INFORMATION DISPLAY (if fitted) cont.

Trip computer continued

Range (distance to empty)

The range is calculated from the instantaneous fuel level in the tank and the average consumption for the last 20 to 30 km.

After filling up with petrol, the new range value is either displayed by pressing button **R** or it appears automatically after the vehicle has been driven a short distance. The display is shown in km.

Below 50 km: The display switches to Range without pressing button **S** if there is not sufficient petrol in the tank to travel for 50 km. This warning can be cancelled by selecting another function. However, if the ignition is turned off, the Range warning will be displayed again when the ignition is again turned on.

Stop watch

Press button **R** repeatedly for the following sequence:

Switching off the ignition stops the stop watch. When the ignition is switched on, the stop watch is restarted from the point at which it was stopped.

Outside temperature

A fall in temperature is indicated immediately and a rise in temperature after a time delay.

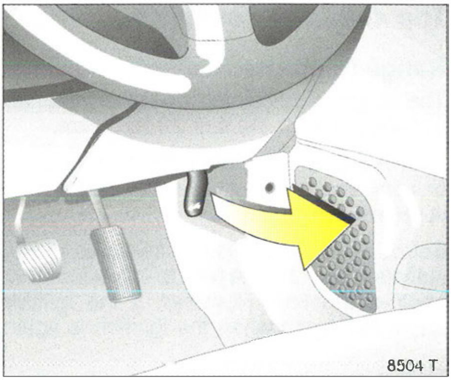
WARNING:

The road surface may already be icy even though the display indicates a few degrees above 0°C.

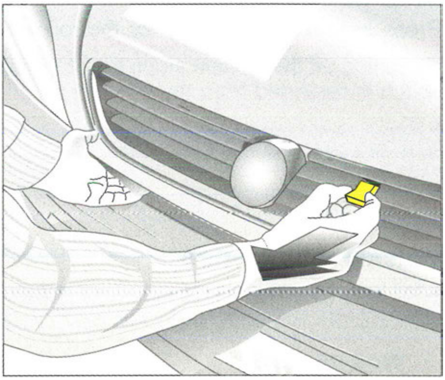
To warn the driver that the road surface may be icy, the display changes automatically to a ❄ symbol when the temperature drops to 3°C or below. When the outside temperature increases, the ❄ symbol does not disappear from the display until the temperature reaches 5°C.

BONNET RELEASE

The bonnet release is located below the dashboard on the drivers side. From inside the vehicle, pull the bonnet release lever towards you. This allows the bonnet to release but is prevented from opening by the safety catch.



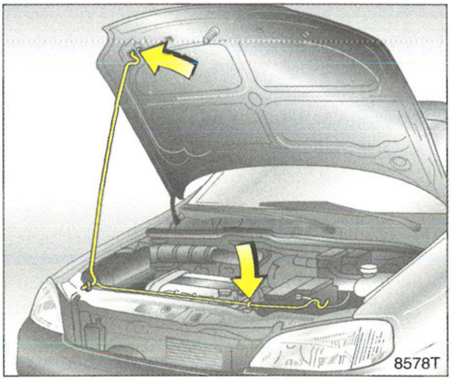
To open the bonnet completely, pull the tab forwards while lifting the bonnet, as illustrated.



Fully open the bonnet and: Insert the support rod into the slot provided.

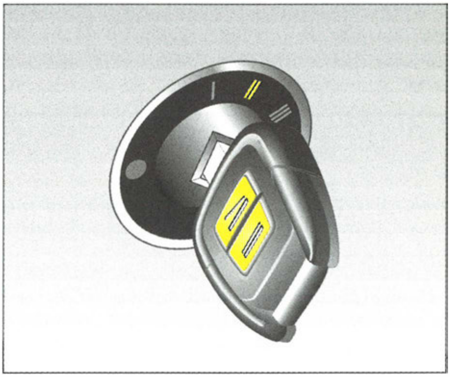
Before closing the bonnet, press the support rod firmly into the holder and lower the bonnet gradually to be finally dropped by its own weight.

Always check that the bonnet is properly closed and that the release lever inside the vehicle has returned to its original position.



IGNITION SWITCH

Ignition



● *LOCK:* Ignition off and steering locked when the key is removed.

I *OFF:* Steering unlocked, ignition off.

II *ON:* Ignition on.

III *START:* Start the engine.

Release the steering column lock

To release the lock, move the steering wheel slightly and turn the key to position **I**.

Lock the steering column

Withdraw the key in position ● .

WARNING:

Do not turn the engine off while the vehicle is moving. Power assisted equipment (such as brakes or steering) which are operated by the engine will be ineffective. Vehicles with a manual transmission: never remove the key while the vehicle is moving, as this will lock the steering wheel. Vehicles with an automatic transmission have a lock which prevents the key from being removed while driving. Refer to Chapter 4.

An audible warning will remind you when:

- you are leaving the vehicle and have not removed the ignition key
- you are leaving the vehicle and have left the headlights or park lights on.

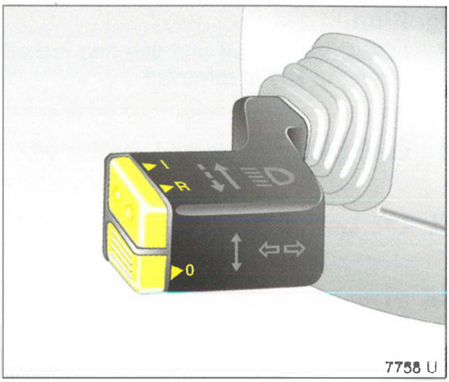
CRUISE CONTROL (if fitted)

The cruise control maintains the vehicle's speed without you having your foot on the accelerator pedal and operates at speeds over 30 km/h.

The cruise control lever is on the left side of the steering column. The lever has two switches.

The **O** (off) switch is at the bottom of the lever and is activated by pushing it in towards the steering column.

The top part of the switch is used to adjust speed. It is a two part switch, marked **I** (increase) and **R** (reduce).



Switching on

Press the accelerator pedal until the vehicle is travelling at the desired speed of (above 30 km/h) and then tap the **I** button. You may now release the accelerator pedal, as the cruise control is now maintaining speed.

To increase speed with the cruise control on

Hold down button **I** or tap it repeatedly: The speed is increased continuously or in steps of 2 km/h without using the accelerator pedal.

When button **I** is released, the selected speed is stored and maintained.

To decrease speed with the cruise control on

Hold down button **R** or tap it repeatedly: The speed is reduced continuously or in steps of 2 km/h without using the accelerator pedal.

When button **R** is released, the selected speed is stored and maintained.

Switching off

Tap button **O**: The cruise control is switched off and the vehicle slowly decelerates. To continue driving, Press the accelerator pedal in the usual way.

The cruise control is also switched off when:

- vehicle speed drops below 30 km/h
- the brake pedal is pressed
- the clutch pedal is pressed, or
- the selector lever of vehicles with automatic transmissions is moved to N.

CRUISE CONTROL (if fitted) cont.

Resuming the stored speed

Tap button **R** when the vehicle's speed is above 30 km/h. The speed selected before the cruise control was switched off is resumed.

The stored speed is erased when the ignition is switched off.

WARNING:

- **Do not use the cruise control when road or driving conditions could require varying speeds. A constant speed may not be practical in heavy or varying traffic, or on winding, slippery or rough roads.**
- **Remember that when the cruise control is maintaining your speed taking your foot off the accelerator pedal will not reduce speed. To quickly deactivate the cruise control you should press the brake or clutch pedal, or push the 'O' button.**
- **If your vehicle is fitted with an automatic transmission it is advisable to switch on the cruise control only when the transmission T-bar selector is in 'D'.**
- **The cruise control will not apply the vehicle's brakes. Therefore the vehicle may gain speed when going down steep hills.**
- **When climbing steep hills (particularly when towing) it is possible for the vehicle to lose speed. You may need to switch off the cruise control and instead use the accelerator pedal.**

CHAPTER 2

Locks

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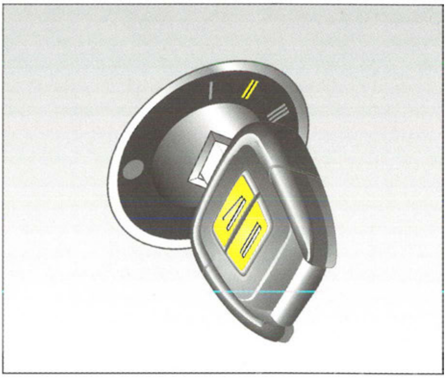
2-2 Immobiliser
2-3 Keys
2-3 Locks
2-4 Door locks
2-4 Deadlocking
2-5 Electric door locks
2-6 Remote control
2-7 Tailgate
2-7 Glovebox

IMMOBILISER

Electronic immobiliser key



The key protects the vehicle from theft by means of an electronic engine immobiliser. The system checks whether the vehicle is authorised to be started using the key. If the key has been accepted as 'authorised' the vehicle can then be started.

To activate:

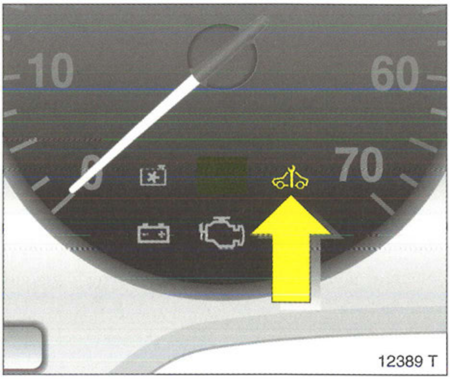
Switch off the engine, turn key to position ● and remove.

To deactivate:

Turn the key to position **II** (ignition on); the engine can then be started.

Deactivation is not possible in any other way, so keep a spare key in a safe place!

Control indicator for immobiliser



When the ignition is switched on, the control indicator 🚗 in the instrument panel lights up briefly. If the control indicator flashes when the ignition is on, there is a fault in the immobiliser system. If the engine cannot be started:

1. Turn the key to ● in the ignition switch and remove.
2. Insert the key into the ignition switch.
3. Repeat the starting procedure.

If the control indicator 🚗 continues to flash, try to start the engine using the spare key and consult a Holden Retailer.

If the control indicator 🚗 lights up after the engine has started, there is a fault in the engine electronics or the automatic transmission. To remedy this fault, consult your Holden Retailer.

Note: The immobiliser does not lock the doors. Therefore, always lock vehicle before leaving it unattended.

KEYS AND LOCKS

Security

Your vehicle has a security card which lists various security numbers for your vehicle. Please keep the security card in a safe place, away from your vehicle.

Free turning door locks

The door lock cylinder is designed to free turn if it is forcefully rotated without the correct key or if the correct key is not fully inserted. To reset the door lock cylinder, turn the lock with the correct key until its slot is vertical, remove the key and then re-insert it. If the lock still free turns, turn the key through 180 degrees and repeat the operation.

Note: This feature is provided as a theft deterrent - to prevent the lock being forced open. The force required to make the key 'free turn' reduces each time. As the force gets easier with each free turn please do not attempt to demonstrate or test this feature and always remember to fully insert the key when locking and unlocking the doors.

If you have problems with this system contact your Holden Retailer. Remember that your vehicle is covered for the first 3 years by Roadside Assistance, refer to Chapter 9.

Fuel filler release

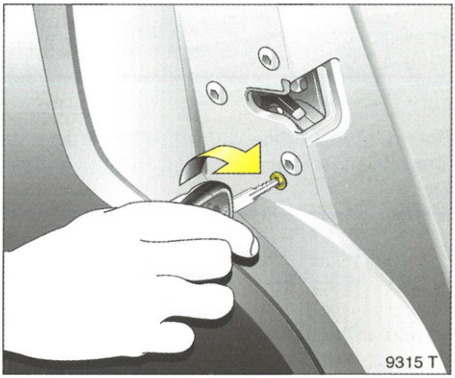
The fuel filler flap is unlocked whenever the doors are unlocked. Refer to Chapter 5 for information about refuelling.

Childproof switches for the rear doors

Childproof switches help prevent the rear doors from being accidentally opened by small children from inside the vehicle.

The switches are provided on the rear edge of the rear doors, accessible when the door is open.

Using the ignition key, turn the switch away from the vertical position: the door cannot be opened from the inside. It can only be opened by pulling up the inside door lock button and then raising the outside door handle.



WARNING:

For safety, check that the childproof switch is operating correctly (after setting) by trying to open the door from inside the vehicle.

DOOR LOCKS AND DEADLOCKING

Locking the vehicle

Press the rear button of the remote control or turn the key in driver's door. This locks the doors, tailgate and fuel filler flap.

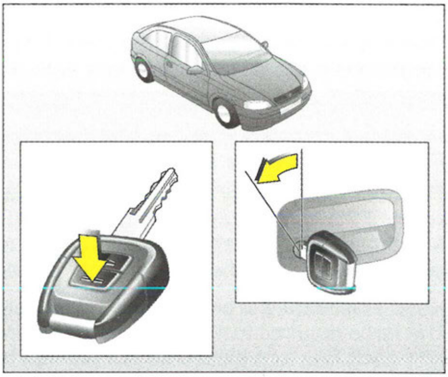
To deadlock all doors, press the rear button on the remote control again within 10 seconds after locking.

or

Turn the key in the driver's door lock towards the rear of the vehicle again within 10 seconds after locking, then turn it back to the vertical position and remove.

Deadlocking locks all doors so that no door can be opened - even if entry is gained by breaking glass. Doors can only be unlocked from outside the vehicle with the ignition key.

Do not use the deadlock if there are people in the vehicle. The doors cannot be unlocked from inside.



To lock the doors from inside

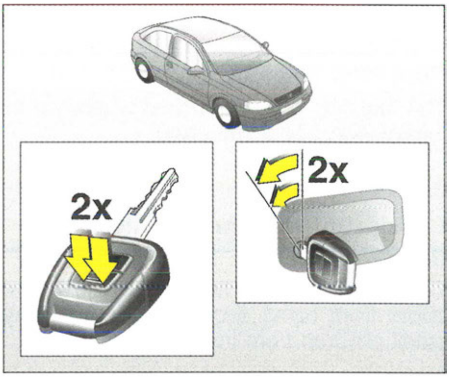
Press the lock buttons.

Doors are locked when the inside lock button is down and unlocked when the lock button is up.

To prevent the driver being inadvertently locked out, the lock button on the driver's door cannot be pressed down when the door is open.

For safety reasons, the vehicle cannot be locked if the ignition key is in the ignition lock.

If the driver's door is not closed properly, the central locking system will unlock again immediately after locking.



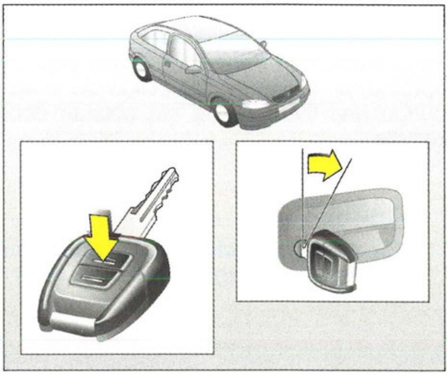
Unlocking the vehicle / opening the doors

Direct the remote control towards the vehicle, press the front button and raise the door handle.

The doors, tailgate and fuel tank filler unlock and the interior light is switched on.

Alternatively, turn the key in driver's door and raise door handle.

Unlocking the doors deactivate deadlocking.

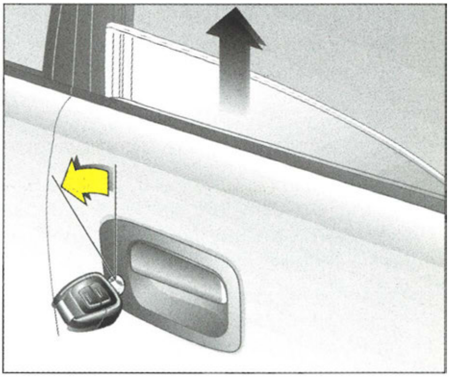


ELECTRIC DOOR LOCKS

Closing electric windows (if fitted)

The electrically operated windows can be closed from outside the vehicle by holding the key in the door locking position until the windows are fully closed.

The Convertible Astra's electric windows can also be closed by pressing and holding down the ═ button on the key until the windows are fully closed.



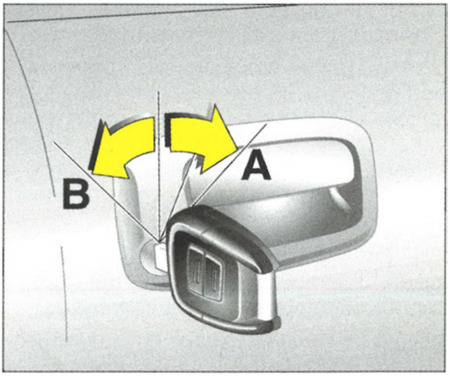
Emergency - flat battery

Unlocking and locking the driver's door in the event of malfunction of the central locking system (e.g. if the vehicle's battery is flat).

(A) Unlock: Turn the key in the driver's door lock towards the front of the vehicle, turning it beyond its resistance point until it will not move any further. Turn the key back to the vertical and remove raise the door handle. The lock button remains in the down position.

(B) Lock: With driver's door closed, turn the key towards the rear of the vehicle until it will not turn any further. Turn the key back to vertical and remove.

The other doors can be unlocked and locked by lifting the interior lock buttons.



Convertible roof (if fitted)

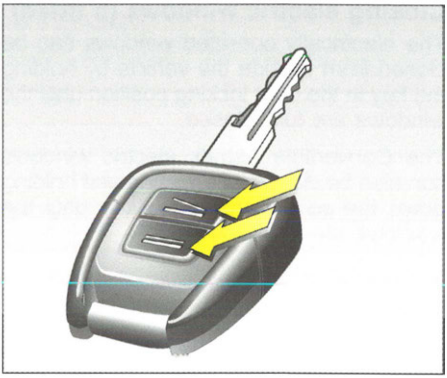
The remote control can also be used for closing and opening the Convertible roof, refer to Chapter 3.

Emergency - accident

Locked doors are unlocked automatically in the event of an accident (to allow assistance from outside), provided that the ignition is not switched off.

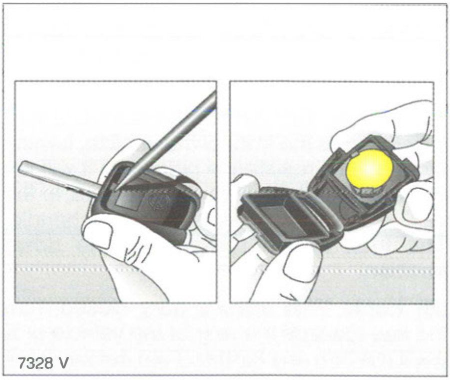
REMOTE CONTROL

Operation notes



- The remote control is powered by a battery inside the key head. A weakening battery is indicated by a progressive 'loss of range', which means you must be closer to the vehicle when pressing the key.
- Tinting the vehicle's windows reduces the range of the key if the tinting material has a metallic film.
- Treat the remote with care; it should be protected against moisture and should not be operated unnecessarily.
- The hazard warning lights on the vehicle flash briefly to show that the remote control is operational.

Changing the remote control battery



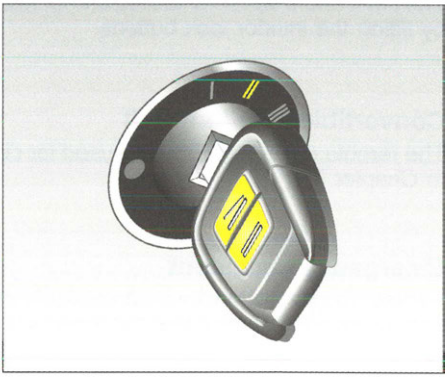
7328 V

Disengage the remote control from the key part using a screwdriver and open the remote control battery cover. Replace the battery (refer to Chapter 8 for the correct battery to be used), ensuring that it is inserted correctly. Close the remote control so that it clicks into place.

The battery change must be performed within 3 minutes, otherwise the remote control will have to be resynchronised.

Ensure that you dispose of the old battery in accordance with environmental protection regulations.

Synchronising the remote control

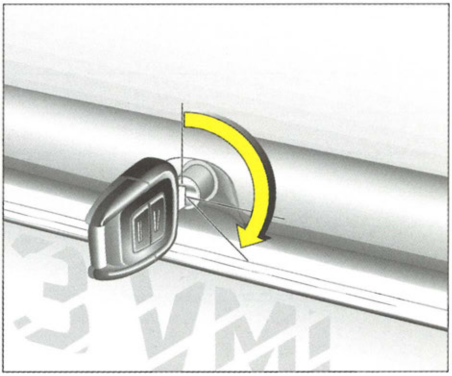


In the event of a malfunction, synchronise the remote control:

- Switch on the ignition; the system will then remain in synchronising mode for 30 seconds.
- Briefly press any button on the remote control unit while the unit is in the ignition.
- The central locking system locks and unlocks to show that the remote control has been programmed.

TAILGATE AND GLOVEBOX

Tailgate



The central locking system cannot be activated using the tailgate lock.

Provided that the key slot is horizontal, the tailgate will lock / unlock when the doors are locked / unlocked.

To keep the hatch / boot lid permanently locked (regardless of the door lock position) turn the key slot to the vertical position.

To unlock the tailgate when the doors are locked, turn the key fully clockwise, as far as it will go. To guard against being locked out, the key cannot be removed in this position. Press the button inwards.

To return the operation to locking / unlocking in synchronisation with the doors, close the tailgate and turn the key back to the horizontal position.

Turning the key to the vertical position will isolate the tailgate lock from the central locking system.

Glovebox

To open the glovebox, pull the handle upwards. To close the glovebox push the lid shut.

To lock the glovebox, insert the key and turn it a quarter of a turn clockwise and withdraw the key.

To unlock the glovebox, insert the key, turn it a quarter of a turn anticlockwise and withdraw the key.

Notes

Notes

CHAPTER 3

Know your vehicle

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3-10 Which type of child restraint for your child?

3-11 Child restraints

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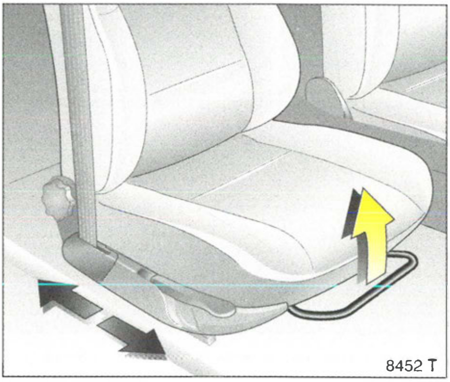
FRONT SEAT ADJUSTMENT

Forward / rearward

Pull the handle at the front of the seat then slide the seat forward or backward. After releasing the handle try to move the seat back and forth to check that the catch has locked in position.

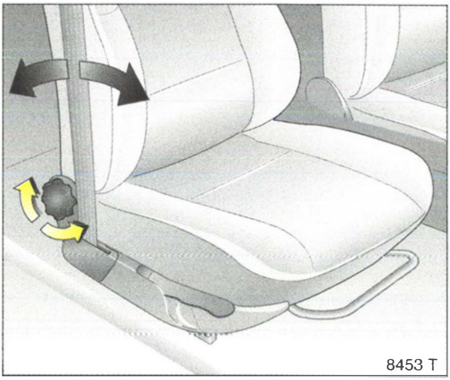


WARNING:

Do not adjust the driver's seat when the vehicle is moving as the seat could move suddenly causing the driver to lose control.

Recline / incline

To adjust the angle of the back of the seat, turn the large, toothed wheel illustrated.



WARNING:

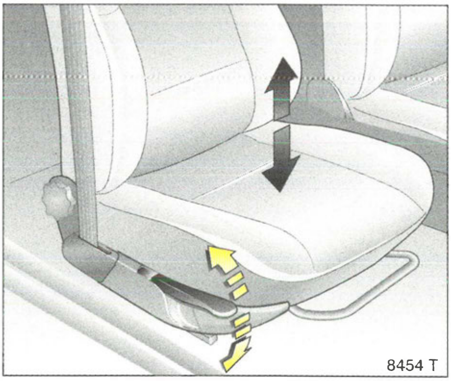
To avoid reducing the effectiveness of seat belts, seats should only be semi-reclined when the vehicle is moving. The fully reclined position should only be used when the vehicle is stationary.

Driver's height adjustment

Pump the lever in the required:

Up: Raises the seat.

Down: Lowers the seat.



WARNING – SIDE IMPACT AIRBAGS (IF FITTED):

Do not fit unauthorised seat covers as they may impair the deployment of the Side Impact Airbags. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat (refer also to 'Airbags' in Chapter 6).

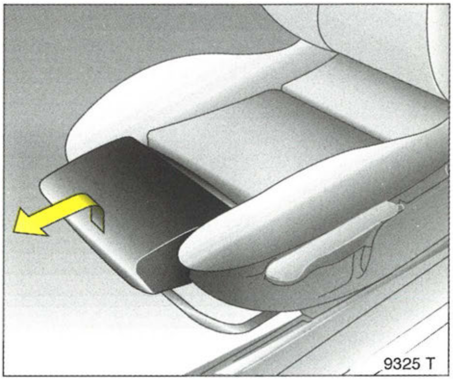
FRONT SEAT ADJUSTMENT cont.

Thigh support (if fitted)

To adjust the front seat thigh support, grasp underneath the front edge of the seat. Lift and pull upwards, to the desired position.

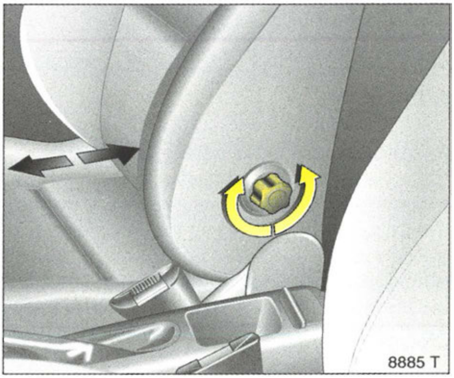
WARNING:

Do not adjust the driver's seat when the vehicle is moving as the seat could move suddenly causing the driver to lose control.



Lumbar support (if fitted)

Turn the wheel on the side of the seat back, as illustrated, to adjust the lumbar support.

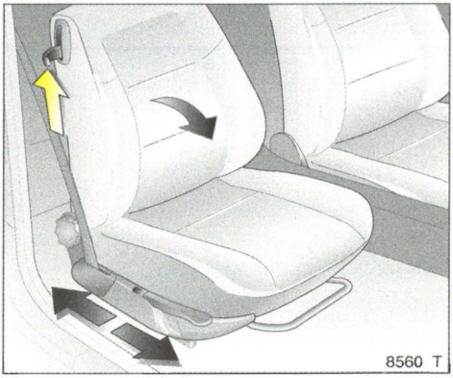


Rear seat access (3 door and convertible only)

To help gain access to the rear seat, a lever is provided on the outer side of each front seat. Pull up the lever and tilt the seat-back forwards. In addition, on some models, the whole seat will slide forward.

To reposition the seat, first push the seat backwards (if sliding type), then tilt the seat-back to the upright position.

Sliding type only: If the seat-back is raised before sliding the whole seat backwards, the seat will lock into its current position and will require manual re-adjustment. The same applies if the lever on the side of the seat is pushed down during re-positioning.



FRONT SEAT ADJUSTMENT cont.

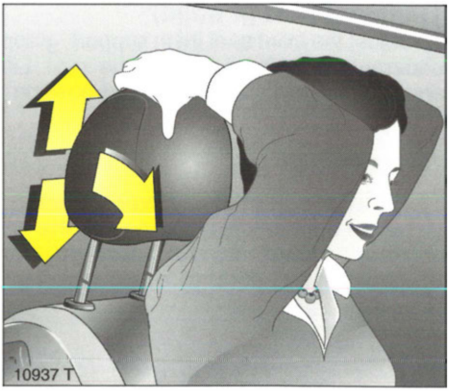
Front seat head restraints

To adjust the tilt angle, move the head restraint backward or forward.

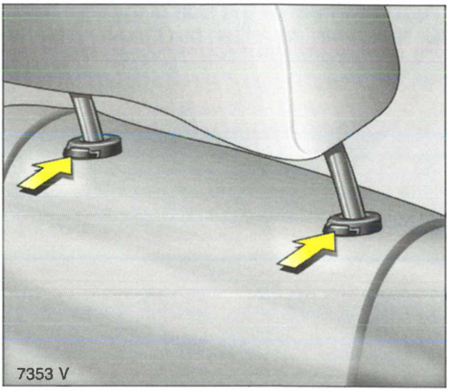
The head restraint must be tilted forwards to adjust the height. Therefore tilt the head restraint forward, hold it firmly, adjust the height and release.

The upper edge of the head restraint should be level with the top of the occupant's head; never at neck level.

After adjusting, ensure the head restraint has locked into position by attempting to move it up or down.



To remove the head restraints, squeeze both locking springs while pulling the head restraint up.



Active head restraints (if fitted)

Your vehicle may be fitted with 'active head restraints'. In the event of a rear-end impact, the active head restraints on the front seats automatically tilt forwards. The head is more effectively supported by the head restraint and the risk of neck injury is reduced.

Front seat heating (if fitted)

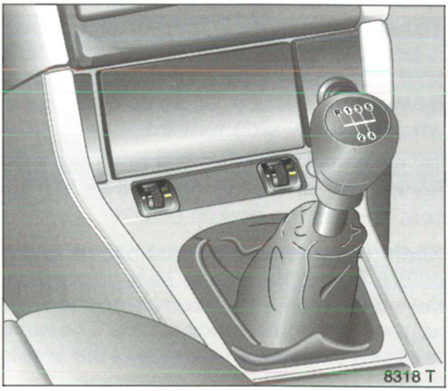
Front seat heating is operational only when the engine is running.

Two thumb wheels are located below the ashtray; one for each front seat.

Turn the relevant wheel to set the required heating level.

To turn off; set the wheel to '–'.

There are indicator lights next to the thumb wheels that indicate when the heat heating is in operation.



REAR SEAT ADJUSTMENT

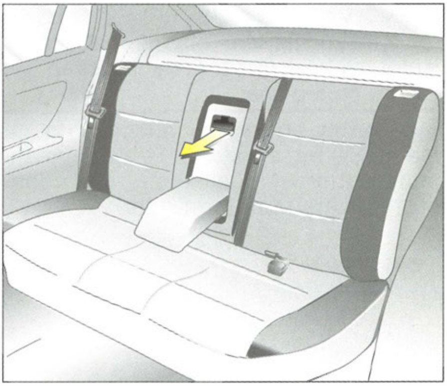
For transporting long objects

Some models are fitted with a centre armrest / load-through area in the rear seat.

To avoid injury from passing traffic, do not stand on the road side of the vehicle when repositioning the rear seat.

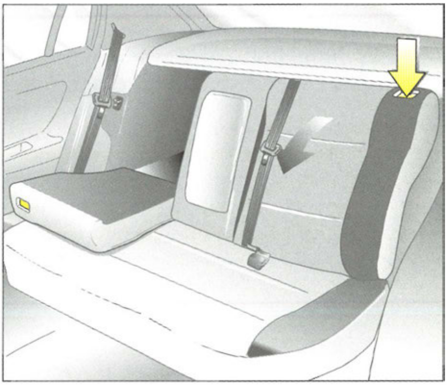
Fold down the centre armrest onto the seat cushion, pull the handle and tilt the cover forwards.

The outer seats can continue to be used for passengers.



or

Disengage one or both rear seat backrests by pressing the push buttons and folding the back rest forward.

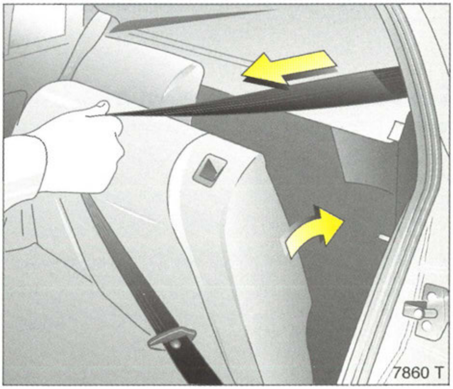


Repositioning the rear seat backrest

When repositioning the rear seat backrests, pull the seat belt forward to ensure it is not trapped.

Also ensure that the backrest is firmly locked into the upright position by grasping and attempting to move it.

The centre seat belt can only be pulled out of the inertia reel when the rear seat backrests are properly locked into position.

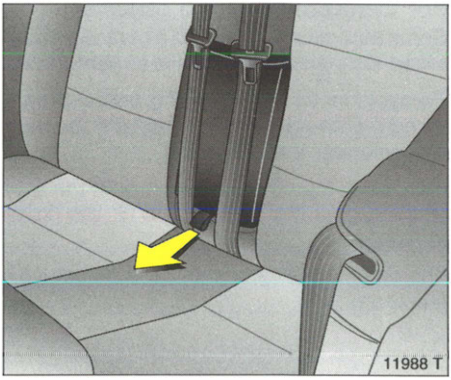


REAR SEAT ADJUSTMENT cont.

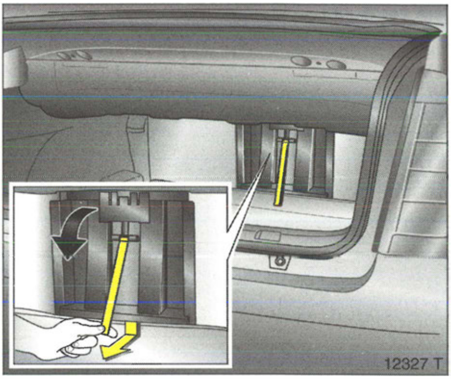
Convertible models

For transporting long objects, pull out the centre armrest (if fitted) by the strap and place it on the seat.

The centre armrest is attached to the seat-back by a fixture. To remove the centre armrest completely, disengage the retainers from the fixture.



Working from the luggage compartment, unlock the cover with the strap and fold it down.



Closing the access opening

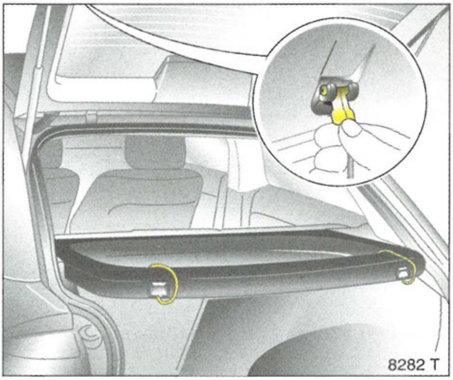
Raise the cover and lock it audibly into place. Fit the centre armrest.

REAR SEAT ADJUSTMENT cont.

Hatch models

For transporting tall objects, unhook the luggage compartment cover at the tailgate.

Remove the cover from the side guides and place it behind the seat backrests.



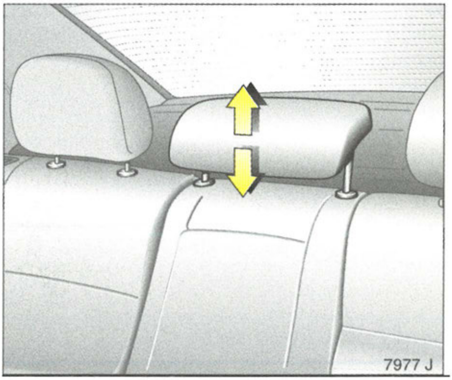
Rear seat head restraints (if fitted)

To adjust the height, pull up the head restraint or press the locking springs and push it down.

The upper edge of the head restraint should be approximately at eye level–never at neck level.

After adjusting, ensure the head restraint has locked into position by attempting to move it up and down.

To remove the head restraints, release both locking springs while pulling the head restraint up.



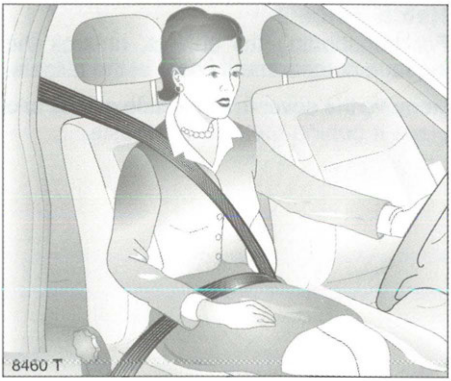
Rear centre head restraint (if fitted)

If the centre seat is not occupied, push the head restraint down to its lowest position by pressing the locking springs and pushing down to improve the rear view. If the centre seat is occupied, set the head restraint to the first or second position according to the height of the passenger.

SEAT BELTS

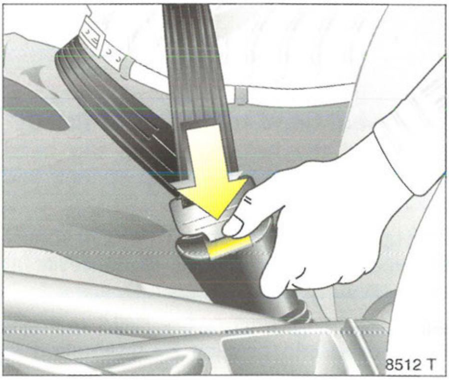
Lap-sash belts

To put on a lap-sash seat belt, pull the metal tongue across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a click. After fastening, settle the belt at the hip, then tension the belt, by tugging the sash upward. Any extra belt length will retract automatically.



The lap section should be worn as low as possible on your hips, not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and fit firmly.

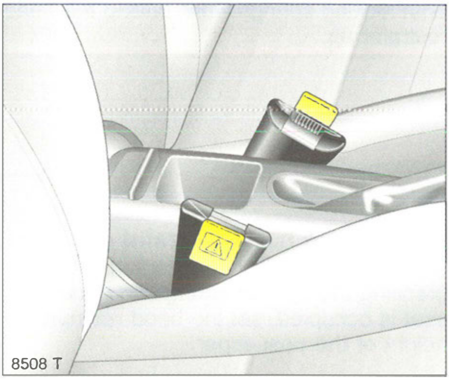
The emergency-locking retractor allows you to move freely while the vehicle is travelling normally. The belt will lock immediately on fast braking, impact with a solid object or any quick movement by the wearer.



To undo the belt, press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.

Seat belt tensioners

The front seat belt system incorporates (once-only) seat belt tensioners. In the event of a front-on or rear-end collision the belt buckles are pulled downwards; the diagonal and lap belts are instantaneously tightened.



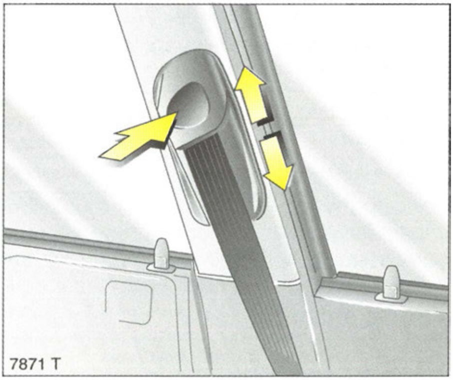
If the seat belt tensioners have been actuated, the control indicator lights up. Actuation may also be indicated by yellow tabs showing on the belt buckles.

Note: If the belt tensioners have been activated they must be replaced by a Holden Retailer. The seat belts remain operational even when the belt tensioners have been actuated.

SEAT BELTS cont.

Seat belt height adjust (if fitted)

- Do not adjust the seat belt height while driving
- Pull the belt out somewhat
- Press the button down or push the belt guide up to the desired height
- Allow the anchorage to lock audibly into position.



Adjust the seat belt height so that the belt passes over the wearer's shoulder and rests against the shoulder. It must not pass over the neck or upper arm. Short people should select a low belt guide position and tall people, a higher one.

Australian law requires that the driver and all passengers be properly restrained at all times with the seat belts provided in the vehicle. Failure to do so could increase the chance of injury and / or the severity of injury in accidents.

Ensure that belts are not damaged or trapped by sharp-edged objects.

WARNING:

- **Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.**
- **Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.**
- **Care should be taken to avoid contamination of the webbing with polishes, oil and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.**
- **It is essential to replace the entire assembly after it has been worn in a severe impact, even if damage to the assembly is not obvious. Belts should not be worn with straps twisted.**
- **Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.**
- **No modification or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.**
- **The positioning of the tongue restrictor must never interfere with, or stop, the belt from fully retracting.**

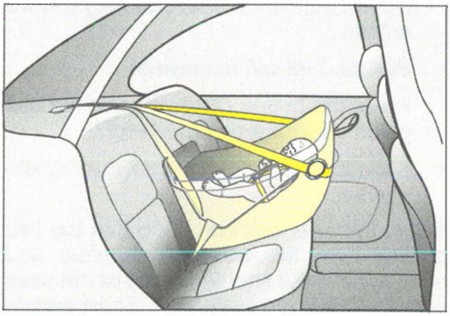
WHICH TYPE OF CHILD RESTRAINT FOR YOUR CHILD?

Children should be restrained at all times and fitted with a child restraint appropriate to their size when travelling in a vehicle. Following are some guidelines about selecting the appropriate restraint for your child.

Infants

Rearward facing infant capsule		
WEIGHT	**HEIGHT**	**APPROX. AGE**
Less than 9 kg	Less than 70 cm	Up to 6 mths

Designed so that in the event of a collision, impact forces will be evenly spread over the baby's back, with minimal jarring to the vulnerable head and neck area.

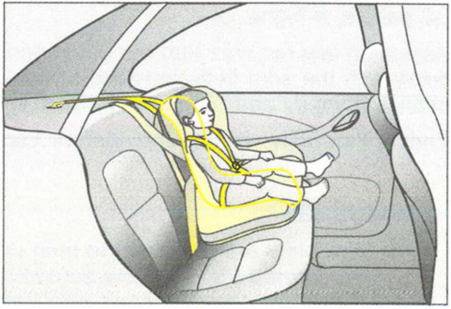


Rearward facing child capsule

Young children

Forward facing child seat		
WEIGHT	**HEIGHT**	**APPROX. AGE**
8 to 18 kg	70 to 100 cm	6 mths to 4 yrs

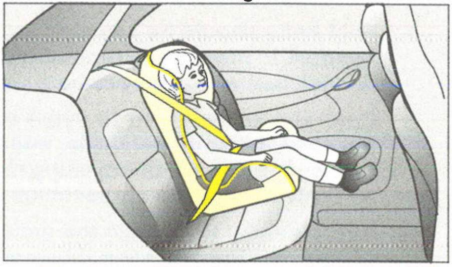
For use when the child is able to sit and easily hold his or her head upright. It is also possible to purchase convertible seats which can be used as a rearward facing restraint or converted to a forward facing child seat.



Forward facing child seat

Booster seat with lap / sash seat belt		
WEIGHT	**HEIGHT**	**APPROX. AGE**
–	More than 100 cm	4 to 10 yrs

When children outgrow a typical forward-facing child seat but they are still too small for lap / sash seat belts. A booster seat raises the child so that the knees bend comfortably, the lap / sash seat belt is correctly positioned and the child can see out the window. A rigid booster seat with a back, side wings and sash guide gives the best protection. In assessing the range of children who would benefit from booster seats, height is a better indicator than age or weight.

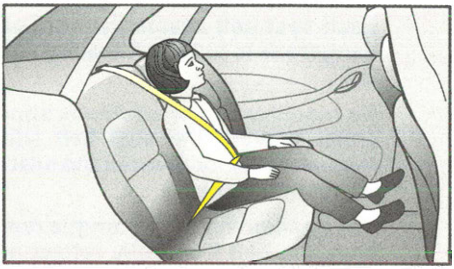


Booster seat with lap / sash seat belt

Older children

A child should use a normal lap / sash seat belt only when:

- he / she can sit against the back of the rear seat with knees bent comfortably at the edge of the seat,
- lap belt rests low and snug across the hips – not across the stomach,
- sash belt is centred on shoulder and chest,
- he / she is able to stay seated like this for the entire trip.

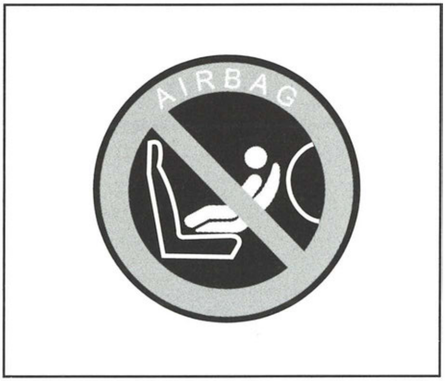


Adult lap / sash seat belt

CHILD RESTRAINTS

WARNING – EXTREME HAZARD:

- **Do not use a rearward facing child restraint on a seat protected by an air bag in front of it. The child could be seriously injured if the air bag inflates, as the child's head would be very close to the inflating air bag.**
- **NEVER install a child restraint in the front seat of a vehicle fitted with Side Impact Airbags (SIAB). Remember that it is safest for children to be seated in the rear seats.**



Children should be restrained at all times when travelling in a vehicle.

Always ensure that the seat belt fits firmly around the child restraint. If a child can not see out of the window, do not raise him / her by means of an ordinary cushion. It will not stay in place in a collision and the child can slip out of the straps and become entangled.

WARNING:

- **Child restraint anchorages are designed to withstand only those loads imposed by correctly fitted child restraints. Under no circumstances are they to be used for adult seat belts, harnesses or for attaching other items or equipment to the vehicle.**
- **Only child restraints that have clips to attach to the vehicle's anchorage fitting (as shown in the following illustrations) are to be used. Earlier types of child restraints may not attach securely to this type of anchor.**
- **Only Standards Australia approved child restraints and harnesses should be used. You should only purchase a child restraint which carries the appropriate Standards Australia sticker of approval.**
- **Where legally allowable, you may install a forward-facing child restraint in the front seat (without SIAB), but always move the passenger's seat as far back as it will go.**

CHILD RESTRAINTS cont.

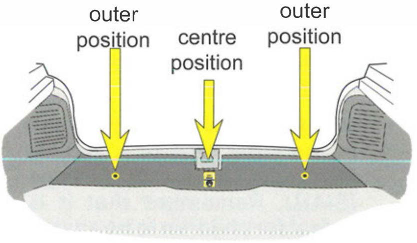
Hatch model

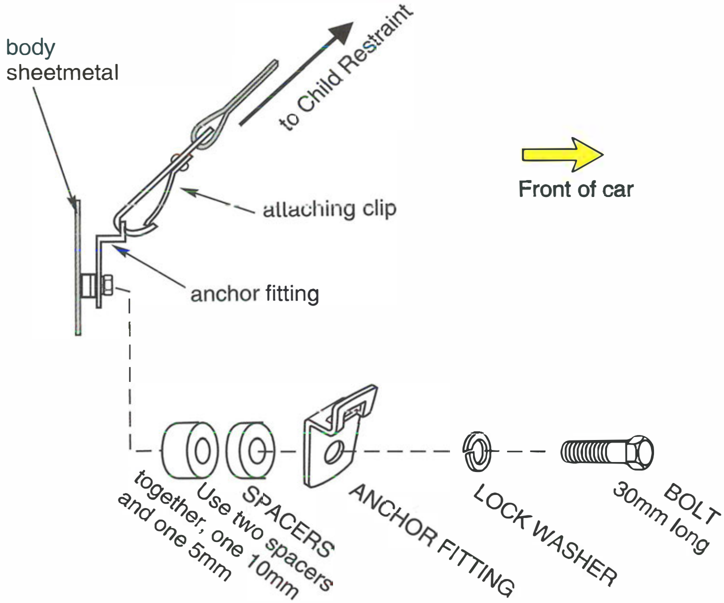
Three anchorage locations are provided behind the rear seats, as shown.

One anchorage fitting has been installed in the centre position.

If you wish to use a child restraint in either of the outer positions, first remove the cover plug, then install an additional anchorage fitting, using the bolt, spacers and washer supplied with a child seat, as per the illustration below. Ensure that the bolts (inner or outer positions) are securely tightened to 15–25 Newton metre (Nm). If unsure, refer to your Holden Retailer.

View looking out the rear of the hatch model


outer position
centre position
outer position


body sheetmetal
to Child Restraint
attaching clip
anchor fitting
Front of car
SPACERS
Use two spacers together, one 10mm and one 5mm
ANCHOR FITTING
LOCK WASHER
BOLT
30mm long

CHILD RESTRAINTS cont.

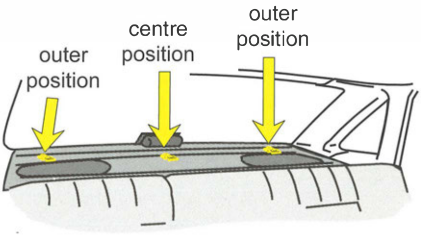
Sedan model

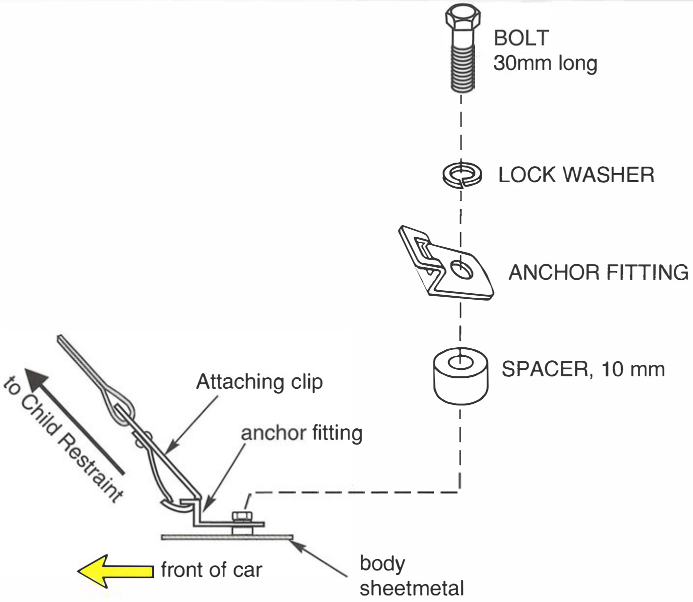
Three anchorage locations are provided behind the rear seats, as shown.

One anchorage fitting has been installed in the centre position, protected by a flip top cover.

If you wish to use a child restraint in either of the outer positions, first remove the cover plug, then either move the existing anchorage fitting supplied in the centre location (remove the cover cap from the restraint assembly if the Holden accessory rear blind is fitted) or install an additional anchor fitting, using the bolt, spacer and washer supplied with a child seat, as per the illustrations below. Ensure that the bolts (inner and outer positions) are securely tightened, to 15–25 Newton metre (Nm). If unsure, refer to your Holden Retailer.

View of the sedan towards the rear window


outer position
centre position
outer position

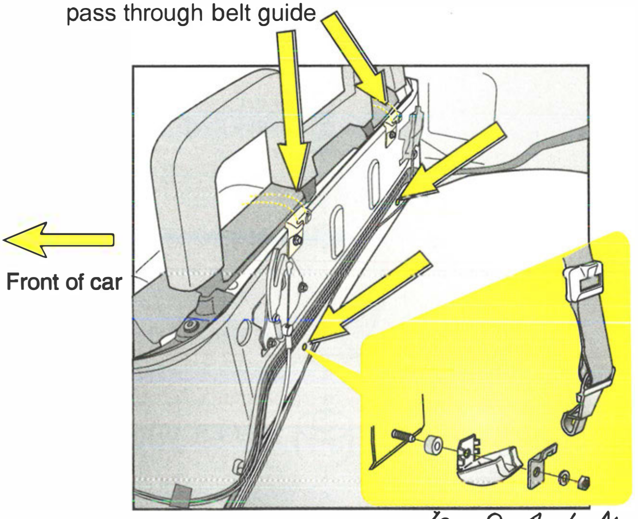

BOLT
30mm long
LOCK WASHER
ANCHOR FITTING
SPACER, 10 mm
to Child Restraint
Attaching clip
anchor fitting
front of car
body
sheetmetal

CHILD RESTRAINTS cont.

Convertible model

Two anchorage fittings are provided on the rear of the rear seat backs. Partially open the roof then pull down the cover to access the anchor fitting.

If an anchorage fitting has been removed, install the anchorage fitting using the nut, spacer and washer as per the illustration below. Ensure that the nut is securely tightened, to 15–25 Newton metre (Nm). If unsure, refer to your Holden Retailer.

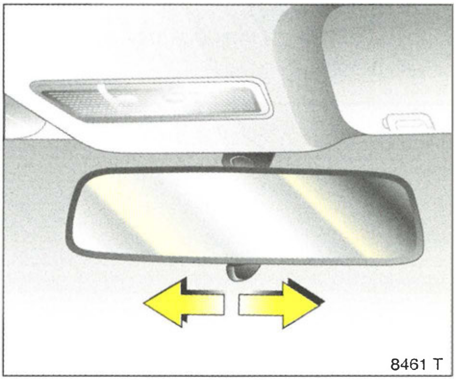

Child restraint belt should pass through belt guide
Front of car
attaching clip
10mm Spacer
Cover
Anchorage fitting
Lock washer
Nut

MIRRORS

Internal rear view mirror

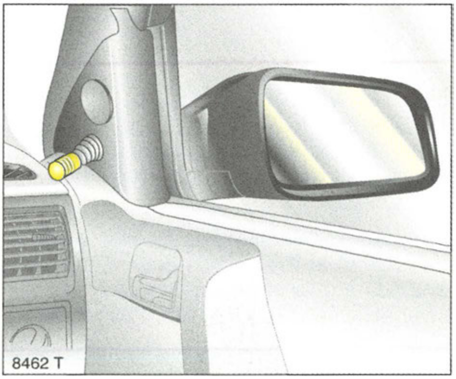
Grasp the mirror and swivel it to adjust the rear view height.

Swivel the lever on the lower edge of the mirror to reduce dazzle at night.



Manual exterior mirrors

Grasp the lever inside the vehicle and move the mirror up or down, and in or out, as required.



Electric exterior mirrors (if fitted)

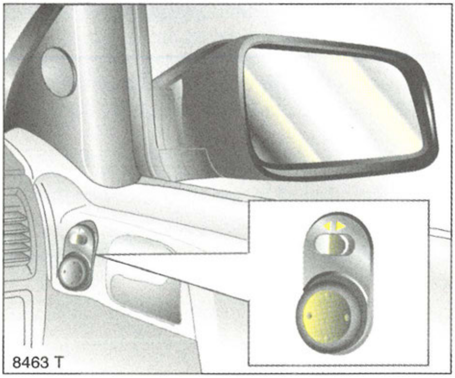
Switch the top rocker switch to either left mirror or right mirror as required.

When the ignition is switched on, the larger, four-way knob can then be used to adjust the angle of the mirror.

The passenger side exterior mirror is convex shaped, making objects appearfurtheraway than they actually are.

For the safety of passengers and pedestrians, exterior mirrors will be released from their support under accident-like impact. To realign mirrors in position, apply slight pressure to the mirror housing.

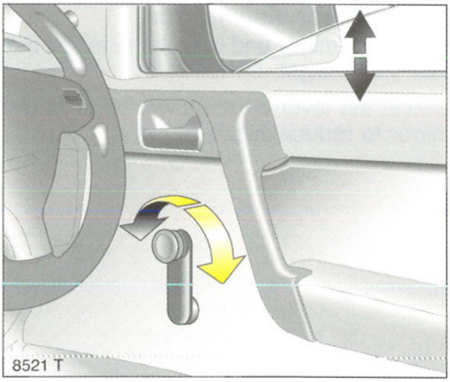
Demisting of the outside electric mirrors is provided when the rear window demister is switched on, refer to Chapter 1.



WINDOWS

Manual windows

Turn the handle on the door to raise or close the windows.



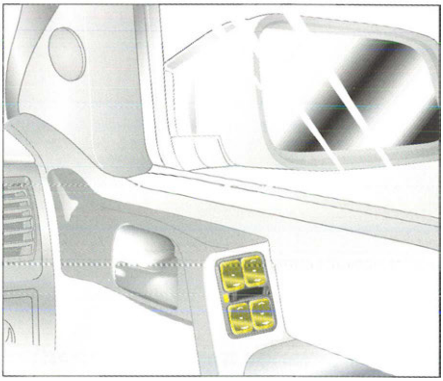
Electric windows (if fitted)

To avoid risk to children (through incorrect use of electric windows), the driver should remove the key from the ignition when leaving the vehicle.

The main rocker switches for the windows are located in the driver's door. The upper switches are for the front windows and the lower switches are for the rear windows.

Individual rocker switches are located on the front passenger door and in the rear doors.

Control indicators in the switches light up when the switches are operational.



To operate the window in stages, tap the switch. For full closing or opening, keep the switch pressed for slightly longer, then release. To stop full opening or closing, tap the switch again.

If the window glass encounters resistance above half way during full closing, movement is immediately stopped and the window will open again.

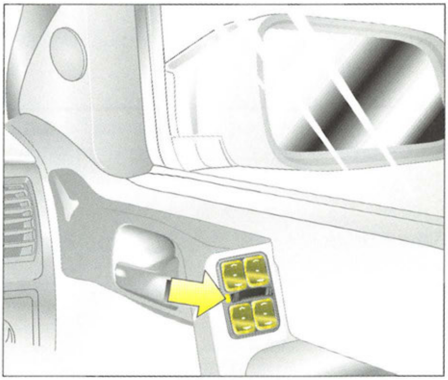
To override this protective system (e.g. if the windows do not move easily due to frost), repeatedly tap the switch for the window until the window has been closed in stages.

WINDOWS cont.

Rear safety switch

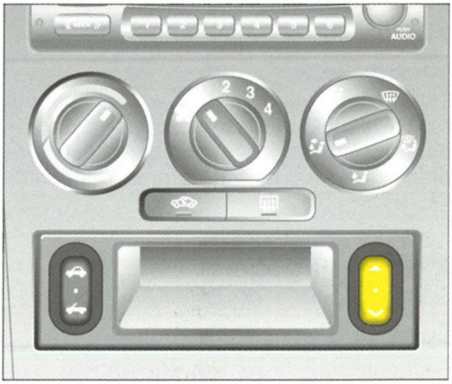
The rear safety switch is located in the centre of the switch panel in the driver's door handle, it is used to deactivate the window switches in the rear doors.

Move the switch to the right. When the red section is visible, the rear windows cannot be operated with the switches on the rear doors. When the green section is visible, the rear windows can be operated with the switches on the rear doors.



Convertible model

A switch is provided beneath the heater controls to open or close all windows at once.

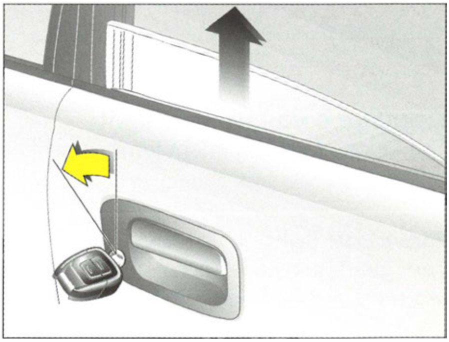


To operate the windows in stages, tap the switch. For automatic opening, keep the switch pressed for slightly longer then release. To stop the window movement, tap the switch again. To close the window keep the switch pressed until the windows are closed.

If a door is open when all windows are being closed, the window in that door will remain slightly open. The window closes automatically when the door is closed.

Interruption of power supply

Full opening and closing of the windows is disabled after an interruption of the power supply (battery / fuse or low voltage). To reactivate the windows, close the doors, switch on the ignition, close the window and continue to keep the switch pressed for at least 5 seconds. Repeat for each window. If the system is overloaded, the power supply is automatically cut off for a short time.



Closing windows from outside:

The electrically operated windows can be closed from outside the vehicle by holding the key in the door locking position until the windows are fully closed.

The convertible Astra's electric windows can also be closed by pressing and holding down the ═ button on the key until the windows are fully closed.

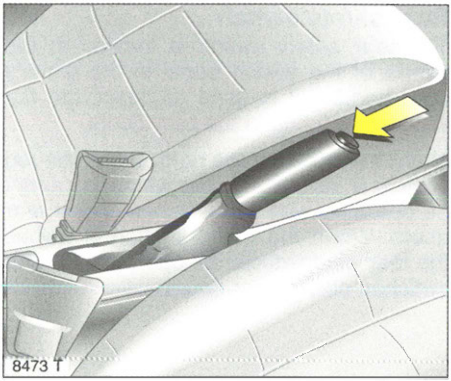
PARK BRAKE AND INTERIOR LIGHTS

Park brake

To apply the park brake, pull the lever straight up.

To release the park brake, pull the lever slightly upwards, push the release button in and hold the release button on the end of the lever and lower the lever all the way down.

Never drive the vehicle with the park brake applied.



interior light

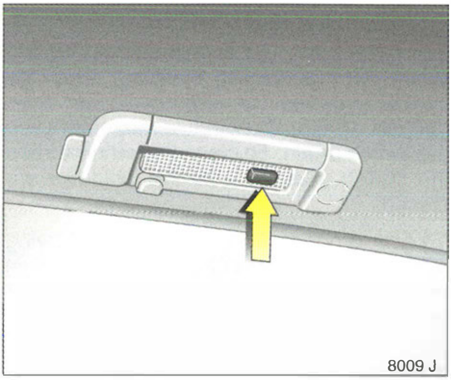
The interior light comes on when either the light switch is pulled outwards or a door is opened. The switch is located in the centre of the headlight switch, refer to Chapter 1.

Rear reading lights

Switch to rear = On

Switch in centre = Off

Switch to front = On when a rear door is opened.



Luggage compartment light

The luggage compartment turns on when the hatch / boot is opened.

Glovebox light

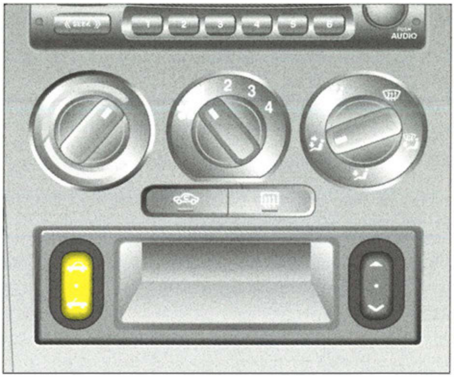
The glovebox light turns on when the glovebox is opened and the ignition is on.

ROOF, CONVERTIBLE MODEL

WARNING:

- **Care must be taken when operating the folding roof. There is a danger of injury, and a risk that objects could become trapped.**
- **Keep a close watch on the roof when adjusting it. Ensure that nothing becomes trapped in it as it moves.**
- **No one must be within the movement range of the folding roof when it is being operated as there is a risk of injury.**
- **Before operating the folding roof, pay attention to the available height, e.g. in garages and covered car parking facilities.**
- **For your safety and the safety of passengers in the vehicle, you must be close to the vehicle when pressing the remote key buttons.**
- **For your safety and the safety of passengers in the vehicle, when operating the roof you must ensure that the areas around the roof and windows are clear of obstructions.**
- **There will be a slight delay after pressing a button on the key before the roof will start to move.**
- **Roof operation may be hindered if the vehicle is parked on an incline.**

The roof can be opened and closed by using the button on the dashboard (beneath the heater controls) or by using the key.



Opening with button on dashboard

Before operating you must ensure that the:

- ignition switch is on,
- vehicle is stationary,
- park brake is applied, and
- boot is closed.

If the 🚗 button is pressed when the park brake is not applied or the boot is open, a warning tone will sound.

Ensure there are no objects in front of the rear window or in the well of the folding roof.

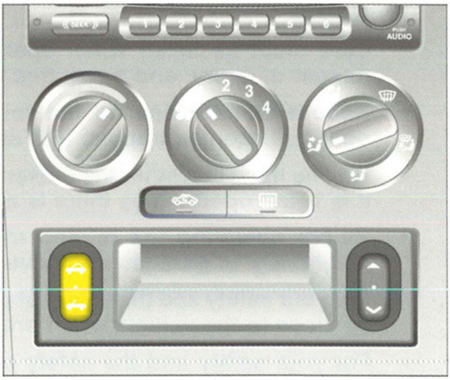
Press the 🚗 button until the roof is fully open and the cover has closed. Opening will halt if your finger is removed from the button. If the roof operation is interrupted, ensure there is nothing impeding the roof from being opened, then press and hold the 🚗 button again.

Two audible 'beeps' will be heard when the operation is complete.

If opening has not worked (after following the above instructions) check that the vehicle's battery is serviceable.

ROOF, CONVERTIBLE MODEL cont.

Closing with button on dashboard



Before operating you must ensure that the:

- ignition switch is on,
- vehicle is stationary,
- park brake is applied, and
- boot is closed.

If the 🚗 button is pressed when the park brake is not applied or the boot is open, a warning tone will sound.

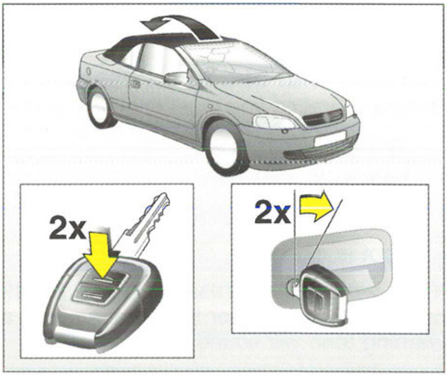
Ensure there are no objects in front of the rear window or in the well of the folding roof.

Press the 🚗 button until the roof is fully closed. Closing will halt if your finger is removed from the button. If the roof operation is interrupted, ensure there is nothing impeding the roof from being closed, then press and hold the 🚗 button again.

Two audible 'beeps' will be heard when the operation is complete.

If closing has not worked (after following the above instructions) check that the vehicle's battery is serviceable.

Opening with remote control or key in driver's door lock



Before operating you must ensure that the:

- ignition switch is off,
- vehicle is stationary,
- park brake is applied, and
- boot is closed.

Unlock the vehicle with the remote control or by the key in the lock.

Press the ≥ button on the remote control until the roof is fully open and the cover has closed. If the roof operation is interrupted, ensure there is nothing impeding the roof from being opened, it may be necessary to move closer to the vehicle then press and hold the ≥ button again.

or

Turn the key in the driver's door lock towards the front of the vehicle and hold it in the unlocked position until the roof is fully open and the cover has closed.

If the roof operation is interrupted, release the key and check that there is nothing impeding the roof from being opened, then turn the key towards the front of the vehicle again.

Two audible 'beeps' will be heard when the operation is complete.

If opening has not worked (after following the above instructions) check that the vehicle's battery is serviceable and, if using the remote control, that the key battery is serviceable.

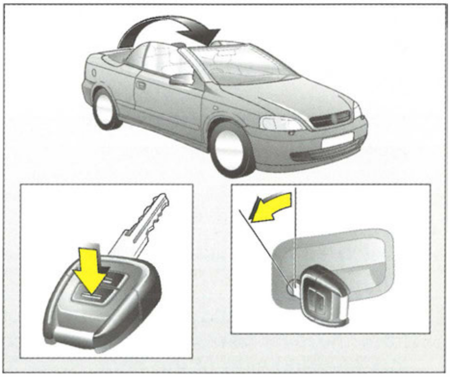
ROOF, CONVERTIBLE MODEL cont.

Closing with remote control or key in driver's door lock

Before operating you must ensure that the:

- ignition switch is off,
- vehicle is stationary,
- park brake is applied, and
- boot is closed.

Press the ═ button on the remote control until the windows and roof are fully closed. Closing will halt if your finger is removed from the button. If the roof operation is interrupted, ensure there is nothing impeding the roof from being closed, it may be necessary to move closer to the vehicle then press and hold the ═ button again.



or

Alternatively, turn the key in the driver's door lock towards the rear of the vehicle and hold it in the locking position until the windows and the roof are fully closed.

If the roof operation is interrupted, release the key and check that there is nothing impeding the roof from being closed, then turn the key towards the rear of the vehicle again.

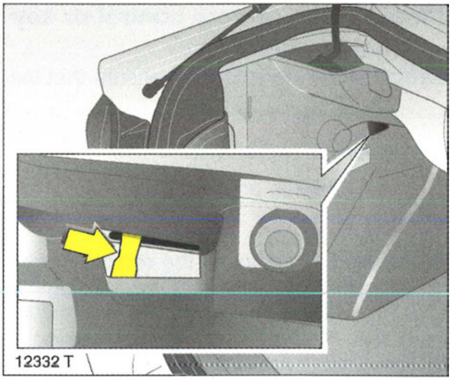
Two audible 'beeps' will be heard when the operation is complete.

If closing has not worked (after following the above instructions) check that the vehicle's battery is serviceable and, if using the remote control, that the key battery is serviceable.

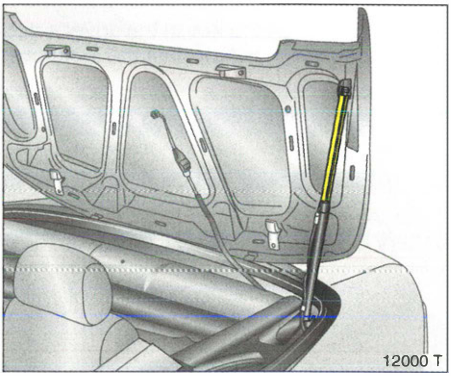
ROOF, CONVERTIBLE MODEL cont.

Fault

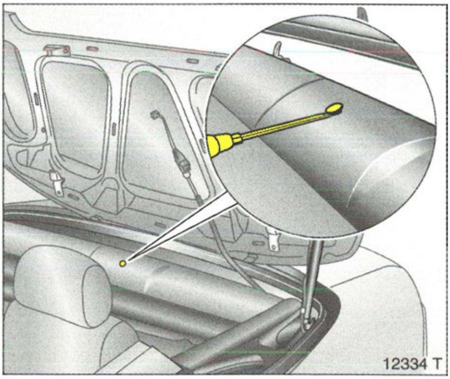
If the electric drive fails while the roof is open, it can still be closed manually as follows:



1. Stop the vehicle and apply the park brake.
2. Open all windows using the rocker switches in the driver's door.
3. Switch off the ignition and remove the key.
4. Open the boot and remove the cover from the emergency lever, located on the left-hand side of the boot. Refer to the illustration.
5. Push the emergency lever forward to release the roof cover.
6. Locate the spacer sleeve from the vehicle tools (stored in bag underneath the spare wheel).
7. Support the cover with the spacer sleeve.
8. Close the boot completely. If the boot is not closed properly, damage may occur.
9. Move the sliding panels forward.
10. Lift the roof cover by hand from the front edge.
11. Install the cover support spacer sleeve on the lifting rod.



12. Using a screwdriver, disengage and remove the cover plug, located in the middle of the roof frame at the front.

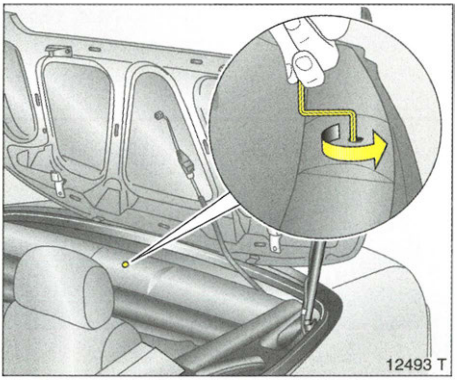


ROOF, CONVERTIBLE MODEL cont.

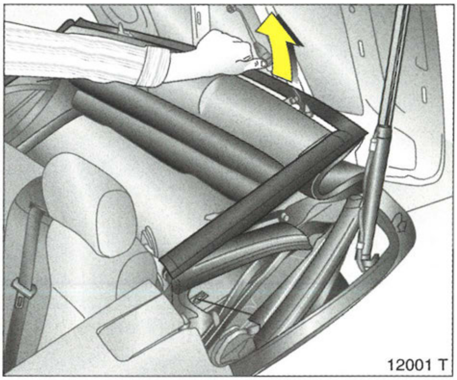
13. Locate the roof crank handle in either the glovebox or the vehicle tool kit.

14. Slot the crank handle into the mount and turn it anticlockwise as far as it will go. The catches on the front edge of the roof are opened.

15. Remove the crank handle.

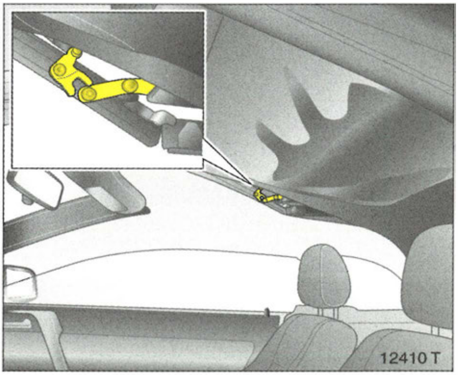


16. Pull the roof forwards. This may require more than one person.



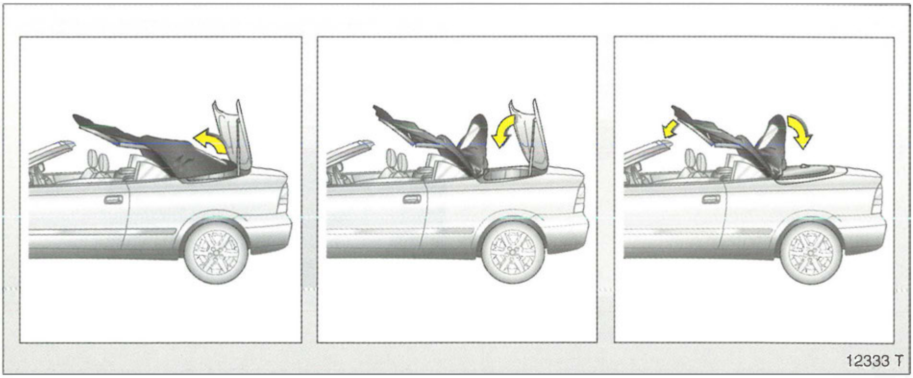
17. As the folding top is being pulled forward, make sure the guide above the windscreen engages in the locator, as illustrated.

    If it does not, you have not turned the crank fully anticlockwise. Open the folding top and repeat the procedure.

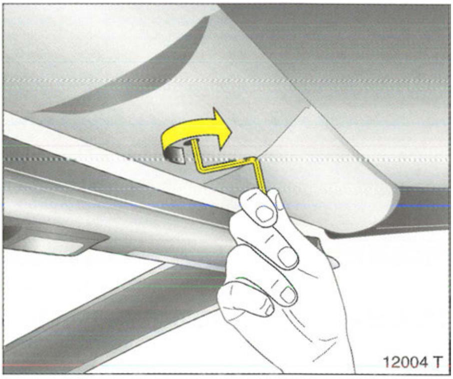


ROOF, CONVERTIBLE MODEL cont.

18. Lift the rear section of the roof, remove the spacer from the lifting rod and close the cover.



19. Lower the rear section of the roof.
20. Press the front edge of the roof forwards until it is just behind the frame of the windscreen.
21. Slot the crank handle into the mount and turn the crank handle clockwise as far as it will go. the folding top is now fully closed.
22. Check that the roof is locked correctly by pressing on the front edge of the roof. Ensure the roof is fully closed before opening the boot, if required.
23. After manual closing, the roof must not be opened again. Contact a Holden Retailer for help with repair.



WIND DEFLECTOR

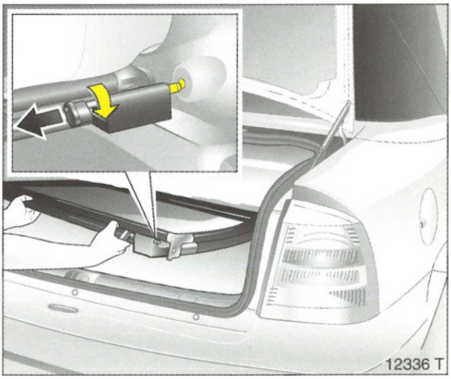
Wind deflector

When the roof is open, the built-in wind deflector reduces air turbulence, draughts and noise in the vehicle interior.

Do not place any objects on the wind deflector.

The wind deflector is folded away in a protective casing in the boot. It is inserted in locators at the side and locked into fixtures at the left and right by means of retainers.

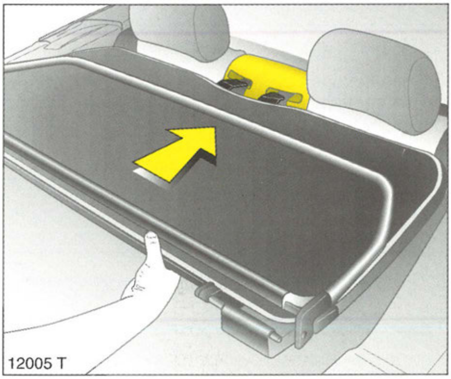
To remove the wind deflector, turn the retainers and pull the deflector out towards the rear of the vehicle.



Fitting

Remove the wind deflector from its protective casing.

Slot the folded-down wind deflector locators into the mounts between the rear head restraints.

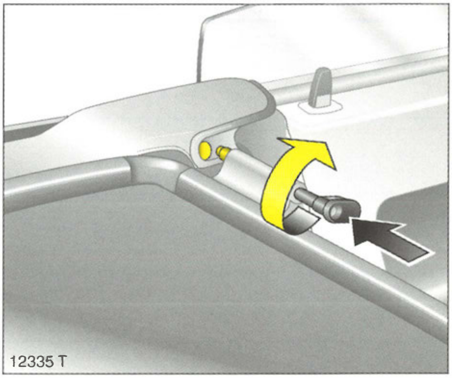


Rotate the left and right retainers to lock the deflector into the fixtures.

Position the wind deflector upright.

Removing

To remove the wind deflector, reverse the fitting operation.



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CHAPTER 4

Driving

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4-8 Anti-lock brake system (if fitted)

4-9 Traction control (if fitted)

4-10 Electronic stability program (if fitted)

ENGINE STARTING

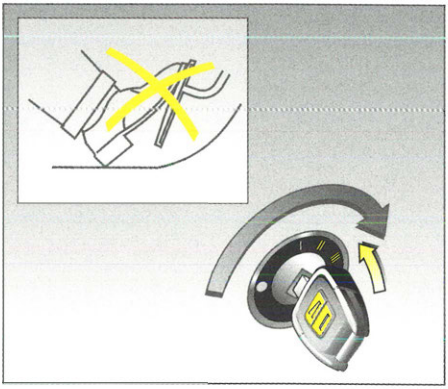
1. Apply the park brake firmly and release only after you have started the engine and are ready to drive off.
2. MANUAL: Press the clutch pedal and shift the gear lever to the N (Neutral) position. The clutch pedal can now be released.

   AUTOMATIC: Move the shift lever to P (park) or N (neutral) position to start the engine.

   Note: To move the shift lever away from the P position, the ignition must be on and the brake pedal pressed.
3. Start the engine as outlined below with your foot off the accelerator.

   For cold or hot starting the procedure is the same. Turn the key to the start position and release the key when the engine starts.

   DO NOT PRESS THE ACCELERATOR PEDAL PRIOR TO, OR DURING, STARTING. PRESSING THE ACCELERATOR PEDAL WILL ONLY INCREASE CRANKING TIME AND WILL NOT HELP THE ENGINE TO START.



If the engine will not start and the check engine warning light (⚙) warning light on the instrument panel is flashing, turn the ignition off for at least 2 seconds before attempting to start the engine again. If the engine again fails to start, consult a Holden Retailer.

Running-in (for the first 1,000 km)

Drive your vehicle at various speeds. Do not use full throttle and never allow the engine to labour.

Make good use of all gears. Press the accelerator pedal a maximum of around three quarters of the available pedal travel in all gears and drive ranges.

Unless necessary, try not to brake too hard during the first 200 km or after new brake pads have been fitted.

Switching off the engine

If the engine temperature is very high (e.g. after driving in hilly areas) allow the engine to idle for approximately 2 minutes (in order to prevent heat accumulation) before switching off the engine.

If the engine temperature is high, the cooling fan may remain on for several minutes after turning off the ignition.

TURBO: After running at high engine speeds or high engine loads, operate the engine briefly at a low load or run in neutral for approximately 30 seconds before switching off in order to protect the turbocharger.

SAFETY

Before entering the vehicle

1. Check that windows, mirrors and lights are clean.
2. Check that the tyres are not flat.

Before driving off

1. Ensure that all doors are secured.
2. Position your seat for comfortable driving.
3. Adjust rear vision mirrors.
4. FASTEN SEAT BELTS.
5. Check that the warning indicators light up when you turn the key to start the engine, refer to Chapter 1.

   AUTOMATIC ONLY: Have the ignition on and press the brake pedal before moving the T-bar away from the P position.

Parking

1. Apply the park brake.
2. Automatic transmission: Place in P (park).

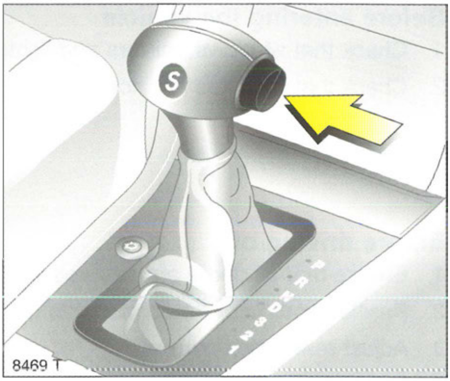
   Manual transmission: place in first or reverse gear.
3. Shut all windows.
4. Switch off the exterior lights.
5. Turn the ignition key to lock ● and remove the key.
6. Lock all doors and set the deadlock, if appropriate, refer to Chapter 2.

WARNING:

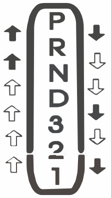
- **Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.**
- **Never leave the engine running in an enclosed space, such as a closed garage or underground car park.**

AUTOMATIC TRANSMISSION

To move the shift lever out of P position, switch on the ignition, press the brake pedal and push in the button on the side of the T-bar as illustrated.



Push in the button when shifting into any position indicated by the black arrow. You can shift the T-bar (without pushing in the button) into any position marked by the outline arrow.

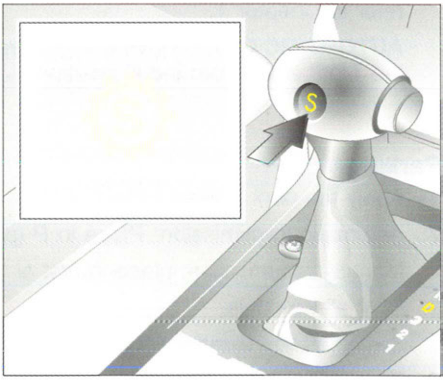


Sports / economy drive

Press the button on top of the T-bar to switch between sports and economy drive programmes.

When the sports programme (higher engine speeds) is selected the indicator light will be illuminated.

Note: When the engine is started and drive selected, the economy programme is automatically selected.



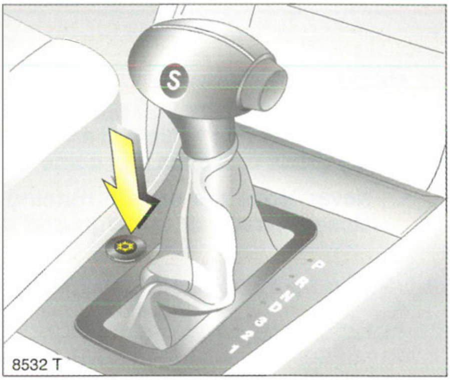
Starting-off aid

In the event of starting-off difficulties on slippery roads, press the Ⓢ button. The T-bar may be in D or 3. When the vehicle moves off it will be in third gear.

Press the button again to switch the system off.

The starting off aid is automatically switched off:

- if the T-bar is moved to position gear 2 or 1
- if the ignition is turned off.



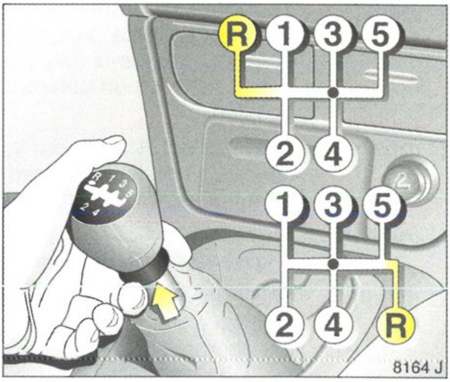
AUTOMATIC TRANSMISSION cont.

P (park)	This stops the front wheels from turning and so should be selected (together with the park brake) when leaving the vehicle. Never select P until your vehicle is fully stopped. The brake pedal must be depressed and the ignition on before the T-bar can be moved away from the P position.
R (reverse)	Never select R until your vehicle is fully stopped. Reversing lights operate when R is selected and the ignition is on. After reversing, make sure the vehicle has fully stopped before selecting a forward gear.
N (neutral)	This is the out-of-gear position. In this gear you may restart a stalled engine while the vehicle is still moving or stopped.
D (fourth)	This is the most effective position for normal or freeway driving. The drive position gives maximum fuel efficiency, as the transmission can choose the appropriate gear (1 through to 4) for the load and driving conditions.
3 (third)	Third is most effective when overtaking and gives responsive acceleration and deceleration, especially in hilly areas. This position allows the transmission to shift between first, second and third gear as conditions require. Drive (4th gear) is excluded.
2 (second)	Use this position when going down a steep gradient to avoid excessive use of the brakes. The transmission will shift between first and second gear as required. Move the lever back into the drive position to return to normal driving.
1 (first)	Use this position when strong braking effect is needed down a very steep gradient. Remember to move the T-bar back to the D (drive) position so that the transmission can shift into higher gears. If 1st gear is selected at too high a speed, the transmission remains in 2nd gear until you have slowed down sufficiently.

Notes:

- If selecting a lower gear than D while driving, ensure vehicle speed is sufficiently reduced before hand.
- Do not press the accelerator pedal with the brakes on in either 1, 2, 3, D or R. This will overheat the transmission.
- Do not use the accelerator pedal to hold the vehicle on a slope. Use the brakes.
- Do not coast the vehicle in N - this lessens your control and negates engine braking power.
- Refer to Chapter 7 when checking the automatic transmission fluid level.
- Note: The engine will not start unless the selector is in P or N.
- Neutral Idle Control: This feature is designed to reduce fuel consumption when idling and stationary. neutral idle control electronically switches the transmission into neutral (without you having to move the T-bar) when the engine is idling in a forward gear (1, 2, 3, D) and the brake pedal pressed. When the brake pedal is released (to move from stationary) the transmission electronically switches back to the selected position of the T-bar.

MANUAL TRANSMISSION



This system has five forward gears and a reverse gear. The shift pattern is found on the top of the gear shift lever.

When selecting fifth gear you must shift the gear lever sideways against light spring pressure in order to pass into the gear.

To select reverse gear, lift the ring beneath the knob on gear shift lever and move the lever into the reverse position.

If the gear does not engage easily, then release and press in the clutch pedal, or try moving to another gear, before trying again.

Shift speeds

The chart shows the recommended change speeds at which gear changes should be made for normal driving. Using shift speeds in the economy mode assists in maximising fuel economy. Upshifting at higher road speeds may be necessary according to varying driving conditions such as load, road gradient, during overtaking and when other than light acceleration is required.

Manual transmission shift speeds (km/h)								
Gear change	2.2 litre engine all models		1.8 litre engine all models		2.0 litre engine SRi Turbo		2.0 litre engine Convertible Turbo	
	Normal	Economy	Normal	Economy	Normal	Economy	Normal	Economy
1st-2nd	20	15	24	20	22	15	25	20
2nd-3rd	40	20	40	35	40	30	42	35
3rd-4th	60	30	64	45	60	45	62	50
4th-5th	80	40	72	60	80	55	80	60

Operating notes

- When shifting from one gear to another, be sure to press the clutch pedal fully to avoid clashing and possible chipping of the transmission gears.
- Never attempt to engage reverse gear until the vehicle has completely stopped. A slight pause (a few seconds) between pressing the clutch pedal and selecting reverse gear it is desirable to allow all the rotating components to stop and avoid gear clashing. Whenever reverse gear is selected with the ignition on, the reversing lights illuminate.
- Shift the gear lever with a moderate effort to allow time for the transmission synchronisers to work properly.
- Do not drive with your foot resting on the clutch pedal. This will cause substantial clutch wear.
- When stopped on an incline, do not hold the vehicle by slipping the clutch. Use the brakes.
- To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift into a lower gear before starting the descent.
- Do not over-speed the engine when shifting down to the next lowest gear.

DRIVING PRECAUTIONS

Brakes

- Power assisted brakes, which are fitted to your vehicle, use vacuum from the engine when it is running. Never let the vehicle run down steep grades without the engine running. Never coast with the engine switched off.
- Driving through water may affect brake performance. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with an assured clear distance ahead until brake performance returns to normal.
- Brake pedal travel should not be obstructed by ill-fitting floor mats or any other material under the pedal which causes interference with normal pedal movement.
- Your seat should be positioned so that you can push the brake pedal satisfactorily under all braking conditions.

Power steering

If the power steering is rendered ineffective because the engine has stalled or if the pump reservoir is empty of fluid, the vehicle can still be steered. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

Loose articles

Do not leave loose articles or luggage in the passenger compartment. Whenever possible, loads stowed in the luggage compartment should be firmly secured. Refer to Chapter 10.

WARNING:

Gas cylinders can leak, creating a risk of fire or explosion. As a precaution, ensure adequate ventilation when carrying gas cylinders. They must be restrained from rolling around, and where possible, placed in the load area of the vehicle. It is recommended that if gas cylinders are frequently transported that a purpose-built carrying compartment be used. Transportation of gas cylinders is regulated by legislation in some states.

Loading the vehicle / fitting LPG

Loading the vehicle changes the mass distribution and therefore the handling of the vehicle when driving. Likewise, fitting LPG to your vehicle changes the mass distribution. After loading the vehicle or fitting LPG, extra care should be taken to become familiar with the handling and feel of the vehicle.

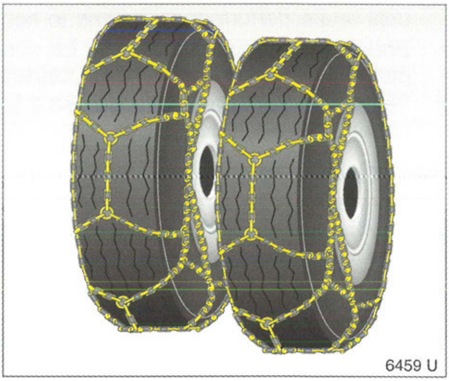
DRIVING PRECAUTIONS – TYRES

Tyre traction

A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other materials are on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.

Snow chains

- Astras are front wheel drive vehicles, and as such, snow chains are only fitted on the front (driving) wheels.
- They must be fitted symmetrically on the tyre to ensure that they are seated concentrically. Only fine-linked chains, not protruding more than 15 mm on the tyre tread and inside of the tyre (including the chain lock) should be used.
- Depending on design, large hub caps may come into contact with parts of the chains. In such cases, remove the hub caps.



WARNING:

Tyre chains can only be used at speeds up to 50 km/h and, when travelling on roads that are free of snow they should only be used for brief periods, since they are subject to rapid wear on hard roads and may snap.

Due to lack of clearance, snow chains may not be used with 205/50/R16 and 215/40/R17 tyres.

ANTI-LOCK BRAKE SYSTEM (if fitted)

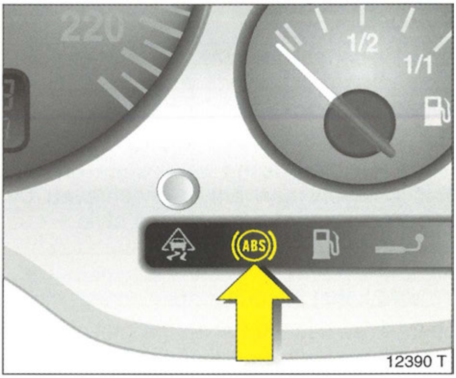
Anti-lock Brake System (ABS) continuously monitors the vehicle's brake system and prevents the wheels from locking, irrespective of the road conditions and tyre grip. It starts to regulate the braking effect as soon as a wheel shows a tendency to lock. The vehicle remains steerable, even in the event of panic braking, for instance on bends or when swerving to avoid an obstacle.

Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.

In an emergency braking situation the driver should keep full force on the brake pedal, without pumping the brake pedal. Pumping the brake pedal can reduce brake efficiency when ABS is controlling the braking.

The ABS warning light is illuminated for a few seconds when the ignition switch is turned to position II (ignition on). If it does not go out, or if it comes on during driving, there is a defect in the ABS. The vehicle's brake system remains operational but without ABS assistance. You should consult your Holden Retailer as soon as possible.

The braking effect is regulated by the ABS every millisecond during braking.



When your vehicle is in a critical braking condition ABS will make itself noticeable through pulsing of the brake pedal and the noise of the regulation process, thereby reminding you to match your speed to the road conditions, even though it is keeping control of the braking.

Shortly after driving off after ABS operation, the system performs a self check which may be audible.

TRACTION CONTROL (if fitted)

Function

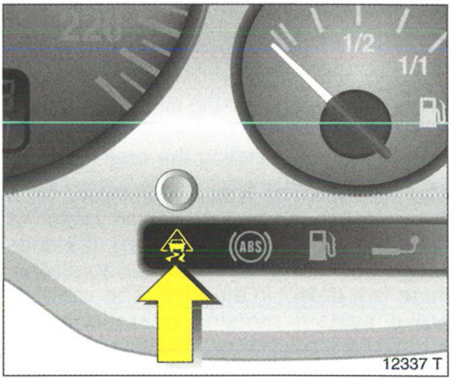
Traction control prevents the driving wheels from spinning. As soon as even one driving wheel starts to spin, traction control reduces the power from the engine and applies the brakes, as necessary. This can improve the vehicle's steering, particularly on snow and ice, as well as on wet or slippery roads.

Control indicator

The traction control light on the instrument panel will start flashing when traction control is controlling wheel spin, indicating that the vehicle is now in a critical situation. During the control operation, the engine power output is reduced (the sound of the engine changes).

Traction control helps you to keep control of the vehicle and reminds you to match your speed to the road conditions.

Note: Do not, let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.



To check that the bulbs are working, the warning light on the instrument panel lights up for a few seconds when the ignition is switched on. If the warning light does not light up, or if it comes on during driving, a fault is indicated in the system and traction control will no longer be operational. You should contact your Holden Retailer.

ELECTRONIC STABILITY PROGRAM (if fitted)

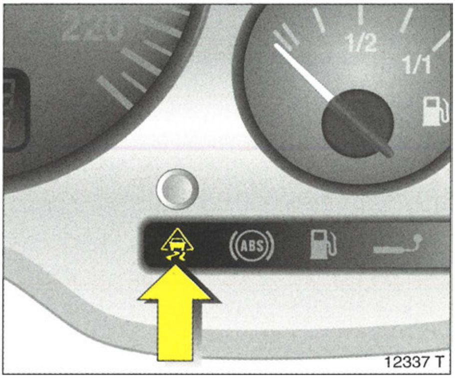
When required, the Electronic Stability Program (ESP) improves driving stability in any driving situation, regardless of the road surface or tyre grip. ESP also contains the functionality of the traction control system.

The system monitors vehicle movements. As soon as the vehicle starts to swerve (understeer / oversteer), engine output is reduced (the sound of the engine changes) and individual wheels are specifically braked. This considerably improves the driving stability of the vehicle on snow and ice and on wet or slippery road surfaces. ESP helps you to keep control of the vehicle and reminds you to match your speed to the road conditions.

Note: Do not let this special safety feature tempt you into taking risks when driving. Traffic safety can only be achieved by adopting a responsible driving style.

The ⚠ light on the instrument panel illuminates for a few seconds when the ignition is switched on. If ⚠ does not illuminate or if it illuminates during driving, a fault is indicated in the system and traction control will not be operational. Have your Holden Retailer check the system.

The ⚠ light in the instrument panel flashes when ESP is operating, indicating that the vehicle is in a critical situation. When this occurs, engine output may be reduced (the sound of the engine may change) and the vehicle may be braked automatically to a small degree.

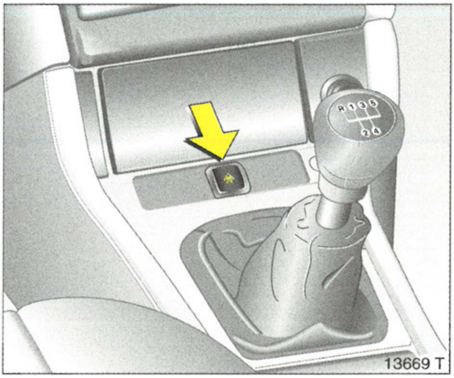


Switch off

ESP is automatically switched on when the ignition is switched on. It is operational when the ⚠ light in the instrument panel turns off.

To manually switch ESP off, press the ⚠ button, as illustrated. The ⚠ light on the instrument panel illuminates.

Press the ⚠ button again to switch ESP on.



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CHAPTER

5

Fuel

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FUEL

EXHAUST WARNING - CARBON MONOXIDE POISONING

- **Exhaust gases can produce carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.**
- **You could inhale the gases if the exhaust system on your vehicle is faulty.**
- **To protect against exhaust gases entering the vehicle, the exhaust system and body should be inspected:**
  - **each time the vehicle is serviced,**
  - **whenever a change is noticed in the sound of the exhaust system,**
  - **whenever the exhaust system, underbody or rear of the vehicle is damaged.**
- **Take the vehicle to your Holden Retailer if you think your vehicle needs inspecting for any of the above reasons.**
- **DO NOT SIT (OR LEAVE CHILDREN OR PETS) IN A PARKED VEHICLE FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING. DO NOT RUN THE ENGINE IN AN ENCLOSED AREA (SUCH AS THE GARAGE) ANY LONGER THAN IS NEEDED TO MOVE THE VEHICLE.**
- **Driving with the hatch / boot open is not recommended. If you must travel with hatch / boot open, close all windows, ensure that the heater controls are set to outside (rather than recirculate) with air directed to the face and the fan on the highest speed. Do not exceed 50 km/h.**

LPG conversion

These vehicles have not been designed by Holden to be converted to LPG and Holden does not provide LPG conversion kits for these vehicles. Please refer to the warranty section in Chapter 9. Your warranty may be invalidated to the extent that any LPG alterations affect the specifications of your vehicle.

Use of Fuel containing Ethanol

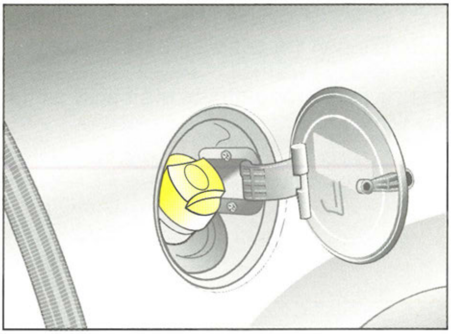
WARNING:

- **When purchasing such fuel, we recommend that your vehicle be operated on fuel containing no more than 10% ethanol. Purchasing your fuel from a reputable fuel retailer may reduce the risk of purchasing fuel with more than 10% ethanol or fuel which contains abnormal fuel properties.**
- **Under no circumstances should you use fuel containing more than 10% ethanol. Use of such fuels may result in engine malfunction, starting and operating difficulties, and materials degradation. These adverse effects could result in permanent damage to your vehicle and personal injury.**
- **It is also important to note that when ethanol blends are used, fuel consumption can be expected to increase due to the lower energy content of ethanol.**

PETROL FILLING

WARNING:

- **Petrol should be regarded as extremely flammable and highly explosive.**
- **Always turn off the engine and any mobile phones when refuelling.**
- **Do not smoke or allow open flames or sparks near the vehicle when refuelling.**
- **If petrol fumes are smelt while driving, the cause should be found and corrected without delay by a Holden Retailer.**



The petrol filler is located on the driver's side of the vehicle.

The petrol flap is unlocked when the doors are unlocked and locked when the doors are locked. Remove the filler cap by turning the cap anticlockwise.

After refilling, tighten the cap firmly clockwise and close the petrol flap.

Over filling of the petrol tank can affect the evaporative emission control system and can also result in a smell of petrol inside the vehicle, therefore:

- Petrol tanks should always be filled at the intermediate or fast fill rate. Do not add any more petrol after the petrol filler first clicks off (or petrol blows back) - as this allows room for the petrol to expand inside the tank.
- It is permissible to 'trickle fill' petrol tanks when vehicles are to be driven for more than 50 km straight after the tank is filled. However, this is not recommended on hot days (over 30°C).
- Wipe off any overflowing petrol immediately from the vehicle and close the fuel opening, spray or splash with water .

Petrol filler nozzle restrictor

To help the atmosphere, your vehicle has been designed to operate on UNLEADED PETROL. A petrol nozzle restrictor is fitted to ensure that only UNLEADED petrol is used. This allows the thinner, unleaded petrol nozzle to open the hinged flap, so that petrol can be added to the tank. The leaded petrol nozzle is wider and therefore cannot open the flap.

WARNING:

The use of fuel other than unleaded fuel will seriously damage the fuel system of your vehicle (particularly the catalytic converter and oxygen sensor) and may void your Warranty.

PETROL FILLING cont.

Petrol requirements Research Octane Number (RON)

Use clean, UNLEADED PETROL of at least 91 octane rating. High octane (PREMIUM UNLEADED) can be used and will provide slight improvement in engine power and torque.

Non-turbo engine: Use unleaded petrol of at least 91 octane rating.

Turbo engine: Use unleaded petrol of at least 95 octane rating (premium, high octane). If premium unleaded petrol is not available, normal unleaded (91 rating) can be used provided that heavy engine loads are avoided, such as driving at high speed, towing in hilly areas or loading up the vehicle excessively.

Note: Slight reduction in engine output and torque may occur if 91 octane petrol is used.

Over filling of the petrol tank can affect the evaporative emission control system and can also result in a smell of petrol inside the vehicle. Do not add petrol after the petrol filler first clicks off (or petrol blows back) as this allows room for the petrol to expand inside the tank.

EMISSION CONTROL

Your vehicle is fitted with emission control systems which are designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen (NOx) that are emitted from the engine and fuel system into the atmosphere. Hydrocarbons and oxides of nitrogen, when exposed to sunlight under certain conditions, contribute to photochemical smog. In addition, carbon monoxide is toxic when it becomes highly concentrated in the air.

Owner responsibility

Vehicles sold and serviced within Australia have been designed to comply with Australian Design Rules and State Regulation emission requirements.

The engine, engine control system or exhaust system of your vehicle must NOT be modified in any way. Any change to the Manufacturer's design may increase the emissions or otherwise defeat the intent of the regulations.

WARNING:

Any person who removes, modifies or hinders any part of the emission control system fitted to a vehicle will be contravening Australian Design Rules, refer A.D.R. 28/01 (External Noise for Motor Vehicles) and A.D.R. 37/01 (Emission Control for Light Vehicles). It is also illegal to drive a vehicle modified in this way.

Maintenance requirements

To ensure continuing compliance with the regulations you must maintain the vehicle emission control system as per the vehicle service manual, at the frequency shown in the Maintenance schedule in Chapter 12.

It is recommended that the necessary servicing be performed by an authorised Holden Retailer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.

Notes

Notes

CHAPTER 6

Emergencies

Page

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Your new vehicle is covered for 3 years by 24 hour Roadside Assistance, refer to Chapter 9.

ACCIDENTS

All motorists are advised to learn what to do at the scene of an accident, particularly where persons are injured. Injured people can choke to death if their air passages are not cleared. They can bleed to death unless the bleeding is stopped. They may require mouth-to-mouth resuscitation or may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs. In all cases, ensure safety for the rescuers, victims and bystanders. The following notes may help.

Part 1. Accident – being involved

If you are involved in an accident you are advised to do as follows:

- Stop immediately and remember to turn off the engine and apply the park brake.
- Remember that time is vital. Remain calm and alert. Think quickly and clearly.
- Give all possible assistance to all injured persons (see Part 3. Medical assistance).
- Send for police and ambulance if anyone has been injured. Give information as accurately as possible. Give the exact location, the number of injured people and a brief report on the overall situation.
- Warn all other traffic approaching the scene. Turn off all ignition switches. Stop any smoking and mobile phone use near spilt petrol. In darkness, try and light up the area to warn others – use hazard lights, a torch, headlights etc. Do not use flammable items.
- Clear the road of accident debris.
- Exchange your name, address, vehicle registration number and the vehicle owner's name and address with the other parties involved in the accident.
- If damage to property only has occurred, report the facts to the owner of the damaged property, to his or her representative, to any police present at the scene or to the nearest Police Station.
- Try to note all important facts because such details may be important if needed later.

Part 2. Accident – being a witness

If you witness a road accident or it becomes your task to stop and help at the scene of an accident:

- Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.
- DO NOT stop at the scene of an accident just to be a spectator.
- Where other people are already in attendance and giving assistance, you should stop only if you can contribute assistance.
- Give what assistance you can to any injured persons. (See Part 3. Medical assistance).

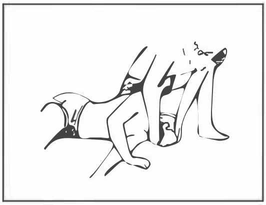
ACCIDENTS cont.

Part 3. Medical assistance

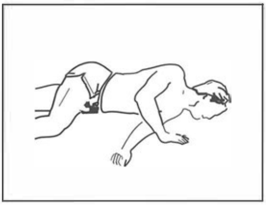
This information is basic first aid information which is intended as a guide only and may not be applicable in all situations. You should always defer to a trained medical officer or other person with first aid knowledge. Protective equipment, such as rubber gloves are recommended.

Keep calm and think clearly. Your experience may not be much but do your best.

- Look after the unconscious person first. Check airway, breathing and circulation. If no breathing, then check if air passages are clear, i.e. nose and mouth. Use your fingers to clear air passages if necessary. If the airway is clear then mouth-to-mouth resuscitation may be needed at once.
- You must be very careful when moving an injured person. It is best not to move at all, except if in danger, as serious and permanent damage can be done to an injured neck or back if not supported during movement. AVOID BENDING OR TWISTING A NECK OR BACK. KEEP THEM STRAIGHT. All injured limbs require support when an injured person has to be moved.
- Unconscious people can choke. To help avoid this:
  - carefully turn the person to one side
  - tilt their head back slightly
  - wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.



- Provided it is not dangerous to do so due to injuries, an unconscious person will do best in the following position:
  - lay the person on one side
  - bend the uppermost knee until the thigh is at a right angle to the body
  - bend the uppermost shoulder and elbow so that the hand lies near the face
  - gently pull the underneath arm so that it rests straight on the ground free of any body weight.



- Try to stop bleeding by applying direct pressure, using your hand, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound BUT NEVER USE A TOURNIQUET.
- Shock may be treated by reassurance, relieving pain, controlling any bleeding and keeping the injured person warm but not hot. It is best not to give any fluids and NEVER ALCOHOL.
- If the injured person is in danger and has to be moved, try and have three or four people help and concentrate on not bending or twisting the neck, spine and injured limbs. Keeping the neck and spine straight is most important.

FLAT TYRE

If using a jack other than the one supplied with the vehicle, refer to Chapter 7 for lifting positions.

WARNING:

- **Use the jack only for lifting the vehicle when changing wheels.**
- **Never get beneath the vehicle when it is only supported by the jack.**
- **Do not start or run the engine while the vehicle is only supported by the jack.**
- **All passengers should be out of the vehicle when it is being jacked.**
- **Use the jack only at the designated lifting points. Use in other locations could damage the vehicle.**
- **The vehicle should only be jacked on hard, level surfaces.**
- **If your vehicle is fitted with alloy wheels and supplied with a steel spare wheel, the flat tyre on the alloy wheel should be repaired and refitted to the vehicle as soon as possible.**

WARNING: Turbo temporary spare wheel

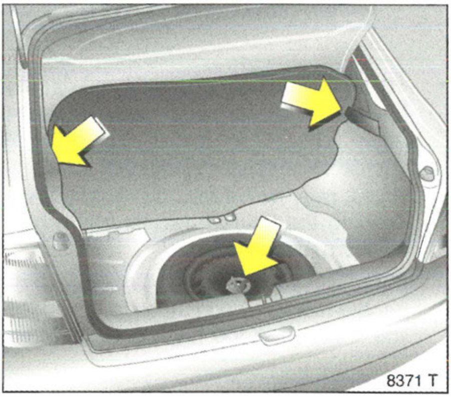
- **Your vehicle is fitted with a temporary spare wheel for emergency spare use only. Drive carefully and do not exceed 80 km/h when the wheel is fitted on the vehicle. Repair and refit the standard wheel as soon as possible.**
- **The temporary spare wheel must have a maximum load rating no less than 545 kg, or a load index of 87, and a speed category symbol no less than L.**

1. Park on level, firm and non-slippery surface, ensure the wheels are pointing straight ahead and set the parking brake firmly.
2. Switch on hazard warning flashers and apply hand brake. Remove the ignition key (to lock the steering) and place manual transmission in R reverse gear or automatic transmissions in P (park).
3. Remove the jack and tools.

   The spare wheel, jack and tools are stored under the luggage compartment floor.

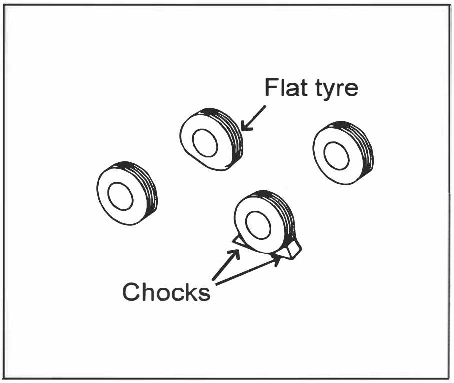
   Hatch only: Hold the floor in place using the recesses at the side.

   Sedan and convertible: raise the floor cover.



FLAT TYRE cont.

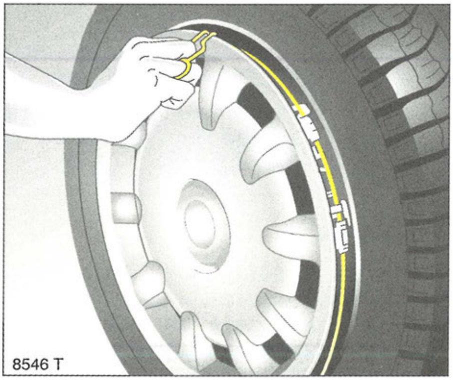
4. Remove the spare wheel (secured by plastic wing nut), jack and vehicle tools, which are stowed in a bag underneath the spare wheel.
5. Chock the wheel diagonally opposite the flat tyre by placing wedge blocks, or any available blocks of wood or rocks behind and in front of the tyre.



6. Remove the wheel trim.

STEEL WHEELS:

For vehicles with wheel covers, remove the cover by hand, using the tool in the vehicle tool kit.

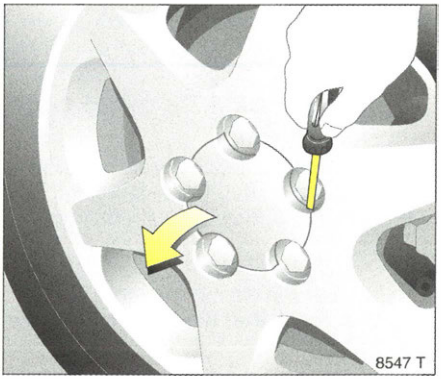


ALLOY WHEELS:

For vehicles with centre caps, use a screwdriver (provided in the tool kit) to remove the cap using the following method.

Position the screwdriver in the recess at the side of the hub cap and lever the cap partly off. Place the screwdriver in the opposite bolt hole and lever the cap fully off the wheel.

Use the screwdriver to remove the wheel bolt plastic caps (if fitted).

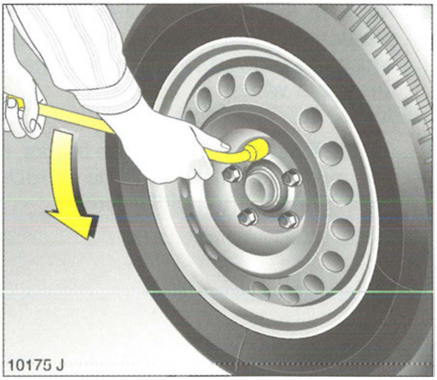


ANTI-THEFT WHEELS:

Use the key provided in the tool kit to remove the centre cap.

FLAT TYRE cont.

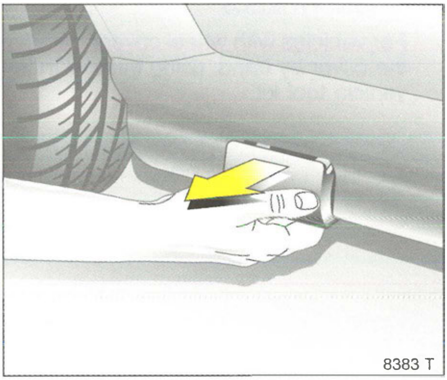
7. Loosen (but do not remove) the wheel bolts by turning the wheel wrench anticlockwise.



8. Depressions concealed by flaps at the front and rear of the vehicle underbody show the points where the jack is to be placed. Fold the flaps outwards to access the jacking points.

WARNING:

Failure to position the jack as described above could result in serious personal injury or vehicle damage caused by the vehicle slipping off the jack.

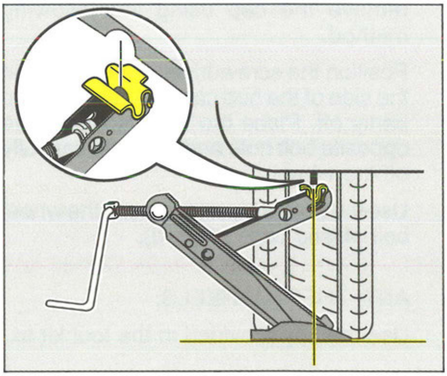


9. Position the jack in the recess that is nearest the flat tyre.

   Ensure that the jack claw surrounds the half circle cutout in the vehicle and that the jack base is in line with the claw.

10. Raise the vehicle by turning the crank handle, until the tyre is clear of the ground.

11. Remove the wheel bolts and place together in a dry spot, to avoid getting dirt on the threads.



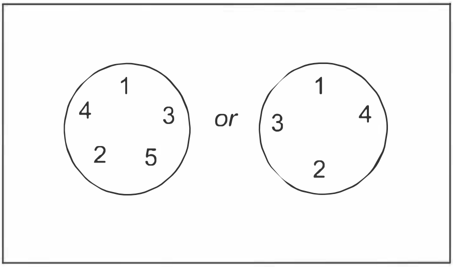
FLAT TYRE cont.

12. Remove the wheel from the vehicle and change it over with the spare.

13. Replace the wheel bolts and tighten by hand. Then, with the wheel wrench, lightly tighten in a crisscross sequence.

14. Lower the vehicle completely and remove the jack.

15. Fully tighten the wheel bolts with the wheel wrench in a crisscross sequence, as shown.



16. Replace the wheel trim:

    STEEL WHEELS:

    Wheel covers have a valve symbol on the rear of the cover, which should point towards the valve. Line the hole for the valve with the valve and press on the wheel trim.

    ALLOY WHEELS:

    Replace the individual wheel stud caps and press on the centre cover.

17. Install the jacking point cover to the body by hand.

18. Stow away the wheel, tools, and jack.

19. Have the flat tyre repaired as soon as possible.

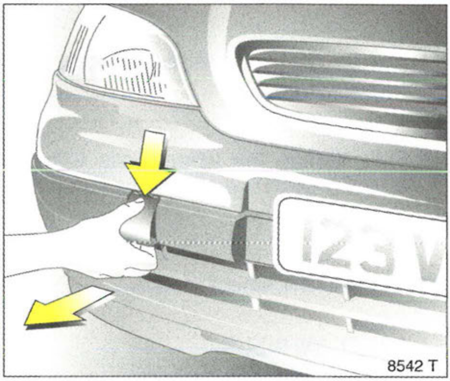
WARNING:

- **As soon as possible after changing a wheel, you should have the wheel bolts tightened with a torque wrench to 110 Newton metre and have the new wheel balanced on the vehicle.**
- **Wheel bolts should be tightened evenly to the correct torque in a crisscross pattern whilst the vehicle in on the ground. Wheel bolts which have not been tightened properly could eventually allow the wheel to come off while the vehicle is moving.**

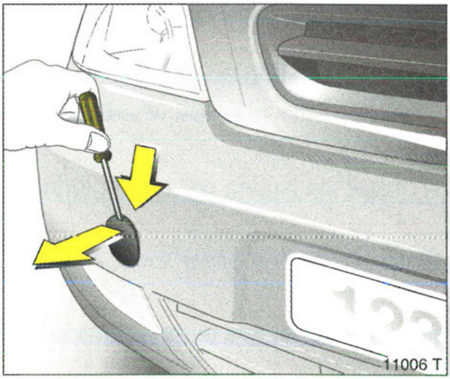
TOWING A DISABLED ASTRA

Proper lifting or towing equipment is necessary to prevent damage during any towing operation of the vehicle. State and local laws must be followed. In an emergency, your vehicle may be towed on all four wheels in the following manner:

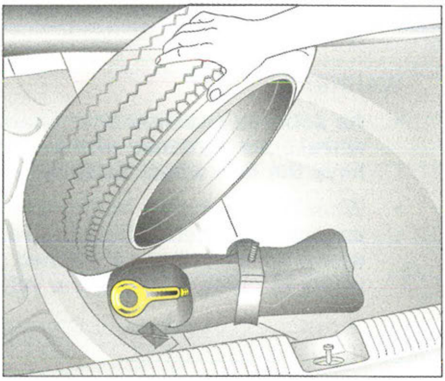
1. The towing eye hole is located behind a cover, at the front of the vehicle, on the driver's side. Access the towing eye hole by disengaging the cover at the bottom and pulling it downwards.



For convertible models, lever off the round cover with a screwdriver, starting at the top.

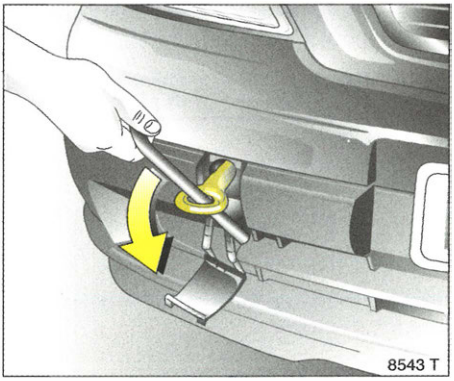


2. The towing eye is located in the tool bag underneath the spare wheel in the luggage compartment.



TOWING A DISABLED ASTRA cont.

3. Screw in the towing eye anticlockwise as far as it will go. Use the wheel bolt wrench to tighten the eye until it is horizontal.



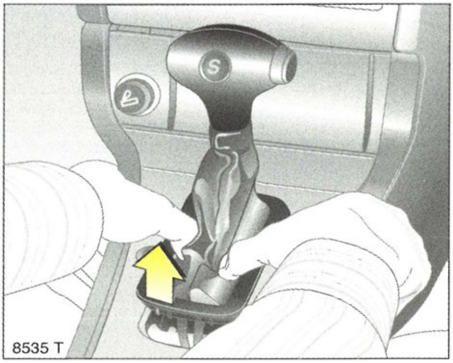
4. Attach a tow rope to the eye. Do not attach to the bumpers, brackets or any other part of the vehicle.
5. Place transmission in N (neutral) position and release the park brake.
6. Switch on the ignition. This frees the steering lock and allows the correct operation of windscreen wipers, horn and turn signals.
7. For safety and to prevent damage to the vehicle it is advisable to avoid jerky movements and to drive slowly during towing operations.
8. Remember that power assist for brakes and power steering will not be available when the engine is off. Therefore, more effort will be required to brake and steer.
9. To prevent the entry of exhaust fumes from the towing vehicle into the passenger compartment of your vehicle, close the windows and stop entry of air by moving heating and ventilation controls to the recirculate position.
10. Vehicles fitted with automatic transmissions should only be towed facing forwards and must not be towed for more than 100 km or at over 80 km/h.
11. If the transmission is defective, or if the above speed or distance is to be exceeded, the front of the vehicle must be raised.
12. Only the driver should be in a towed vehicle.

Automatic transmission

For safety, the transmission has an electric park lock; the key must be in the ignition (in the on position) before the T-bar can be moved away from the P position. If the vehicle's battery is flat, the T-bar cannot be moved as required for towing.

Therefore, to move the T-bar:

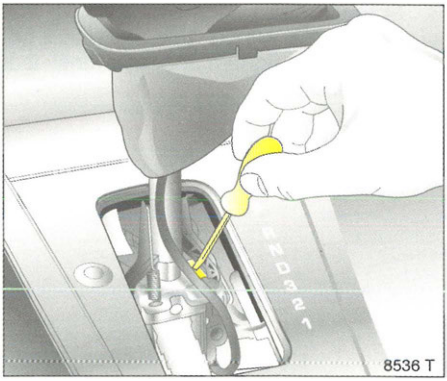
1. Apply the park brake.
2. Disengage the cover from the console below the park brake lever.



TOWING A DISABLED ASTRA cont.

3. Disengage the T-bar trim from the console and fold upwards.
4. Push the catch forward and move the T-bar handle out of the P position, as illustrated.
5. Install the T-bar trim onto the centre console.
6. Install the cover on the console.

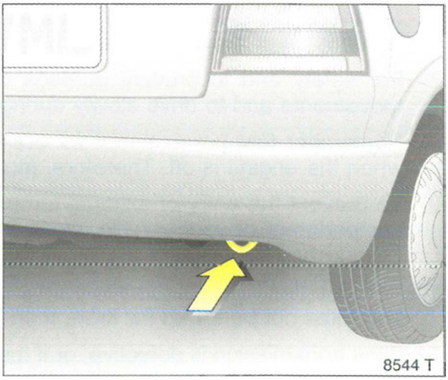
Moving the T-bar back to the P position will re-lock the lever.



Towing another vehicle with your Astra

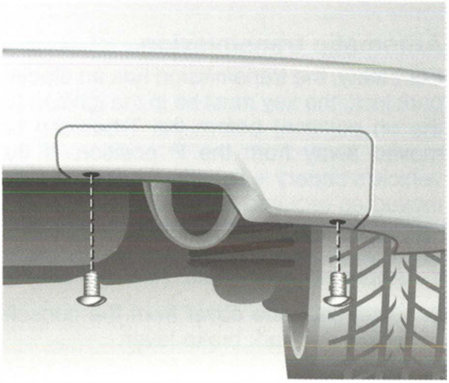
Attach a tow rope to the rear towing eye, never to the rear axle. Drive off slowly and avoid jerky movements.

Never attach the tow rope to the vehicle's axle.



Note: When towing another vehicle with your Turbo SRi Astra – to avoid damage to the lower rear facia, remove cut away by removing the two lower screws.

It is not recommended to tow another vehicle with convertible.



ENGINE OVERHEATING

WARNING:

Immediate action is required if the engine overheats. This can be indicated by the temperature gauge needle moving to the red zone, by steam escaping from under the bonnet, a loss of power or a loud knocking or pinging noise.

Continued driving EVEN FOR A SHORT TIME could cause a fire or vehicle damage.

Pull out of the traffic as soon as possible and stop the vehicle. Leave the engine idling and the park brake applied while you get out and check that the cooling fan is working.

WARNING:

Do not open the bonnet if you can see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before opening the bonnet.

If the fan is working and the temperature gauge needle has not returned to its normal position within a few minutes, stop the engine and remove the ignition key.

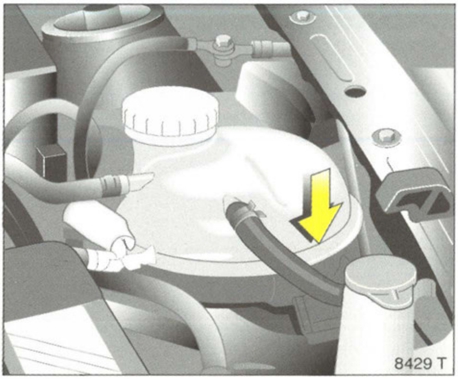
Look for leaks at the radiator hoses and connections, heater hoses and connections, radiator and water pump.

Take care when checking all these areas as they will probably still be hot.

IF YOU FIND A MAJOR LEAK OR OTHER PROBLEMS THAT MAY HAVE CAUSED THE ENGINE TO OVERHEAT, DO NOT RUN THE ENGINE UNTIL THESE PROBLEMS HAVE BEEN CORRECTED.

If you do not find anything wrong then you should check the engine coolant level in the surge tank.

The coolant level in the surge tank should be slightly above the 'KALT' (cold) mark when the system is cold. The level rises with the engine operating temperature and drops again when the engine cools down. If the level falls below the KALT mark, top up the coolant should be replenished to a little over the mark.



WARNING:

Do not remove the cooling system cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

ENGINE OVERHEATING cont.

If the level is low, remove the surge tank cap as follows:

1. Cover the surge tank cap with a thick cloth, slowly turn the cap anticlockwise and remove.
2. Top up the surge tank with clean water to a little over the 'KALT' (cold) mark WHEN THE ENGINE IS IDLING.
3. Replace the cap and leave the engine idling for a few minutes.

If, after taking one or more of the above actions the temperature gauge no longer indicates an overheat condition you can resume driving at a reduced speed. Return to normal driving after ten minutes if the temperature gauge does not again show an overheat condition.

If overheating occurs again you should have the vehicle attended to, as soon as possible, by a qualified mechanic.

Note: With this type of sealed, pressurised cooling system there should be very little loss of coolant. If the surge tank is low a leak is indicated. Therefore you should see your Holden Retailer as soon as possible to fix the leak.

The engine may temporarily operate at high temperatures during more demanding operating conditions, especially on very hot days. These conditions include:

- climbing a long hill
- stopping immediately after high speed driving
- idling for long periods in traffic
- towing a heavily laden trailer or caravan.

Avoid operating your vehicle for prolonged periods in any of the above circumstances if the temperature gauge indicates a high engine coolant temperature.

Refer to Chapter 7, which gives maintenance instructions to help protect your cooling system from overheating.

FLAT BATTERY

WARNING:

DO NOT attempt to push start or tow start this vehicle, as it is fitted with a catalytic converter and if un-combusted fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire.

If your vehicle will not start due to a flat battery, it can often be started by using energy from a battery in another vehicle – a procedure called 'jump starting'.

Please read the following procedure in full before attempting to jump start your vehicle.

However, if after reading the following procedure you are still unsure about jump starting, we strongly recommend for your safety and that of your vehicle that you leave the starting to a competent mechanic.

Jump starting

WARNING:

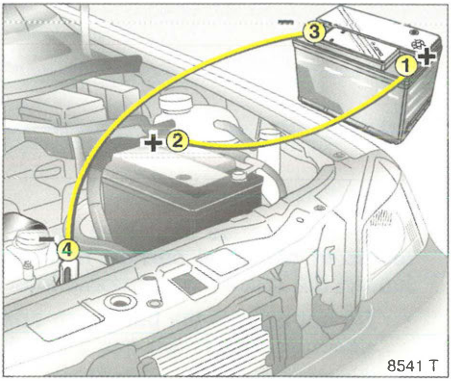
Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore, to lessen the chance of personal injury when working near a battery:

- **Do not expose the battery to open flames or sparks. Battery action generates hydrogen gas which is flammable and explosive.**
- **Do not smoke near a battery.**
- **Wear eye protection such as industrial safety glasses and avoid leaning over the battery whenever possible.**
- **Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid also damages paint and fabrics. To minimise damage, wash off immediately.**
- **Be sure any batteries that have filler caps are properly filled with fluid.**
- **Remove rings, metal watch bands and other metal jewellery before working around the battery.**
- **Carefully follow each step in the jump starting procedures.**
- **Never use a quick charger to start your engine.**
- **Do not lean over the battery during jump starting.**

FLAT BATTERY cont.

- The battery of your vehicle has a negative earth and a 12 volt rating. The battery in the other vehicle must be the same voltage and also have a negative earth. The battery capacity of the charged battery must not be substantially lower than that of the discharged battery. So, check the specifications in the other vehicle's owner manual to see if it complies. Serious injury or damage may result if the wrong type of battery is used.
- Position the two vehicles so that they are not touching and apply the park brakes. Automatic transmissions are to be placed in park and manual transmissions placed in neutral. Turn off ignition, all lights and accessories in both vehicles, except the hazard warning flasher or any lights needed for the work area.

Connect the leads in the order shown in the picture



1. Attach one end of the first jumper cable to the positive terminal of the charged battery (identified by + or P on the battery case or post or clamp).
2. Connect the other end of the same cable to the positive terminal of the flat battery.
3. Attach one end of the second jumper cable to the negative terminal of the charged battery (identified by – or N on the battery case or post).
4. Connect the other end to a solid stationary, metallic point on the vehicle's engine that has the flat battery.

   Note: Do not connect directly to the negative post of the battery.

   The connection should be as far away from the flat battery as possible.

Note:

- When making all connections take care that the clamps from one cable do not inadvertently touch the clamps on the other cable. Also, ensure that jumper cables are not on or near pulleys, fans or other points that will move when the engine is started.
- Start the engine in the vehicle with the charged battery and run the engine at a moderate speed. Then start the engine in the vehicle with the flat battery. Attempts to start the engine with the flat battery should be made at intervals of one minute and should not last longer than 15 seconds.
- After starting, allow both engines to idle for approximately 3 minutes with the leads still connected.
- Leave the engine running as you remove the jumper cables by reversing the above sequence exactly. While removing each clamp, take care that it does not touch any other metal while the other end remains attached.

AIR BAGS

Air bags are fitted for the driver and front passenger, identified by the word AIRBAG on the steering wheel and above the glovebox.

Some models also have side impact air bags, for the driver and front passenger, stored in the side of the seat backs closest to the door. If your vehicle is fitted with side impact air bags there will be labels on the outer side of the front seat back-rests, refer illustration.

The air bags operate as a pair – they are triggered simultaneously. Side air bags, however, are triggered independently.

If your vehicle is involved in a severe front end collision, the front air bags will inflate, assisting the seat belts to restrain forward body movement. A side impact air bag will only trigger on the side of the vehicle that is struck.

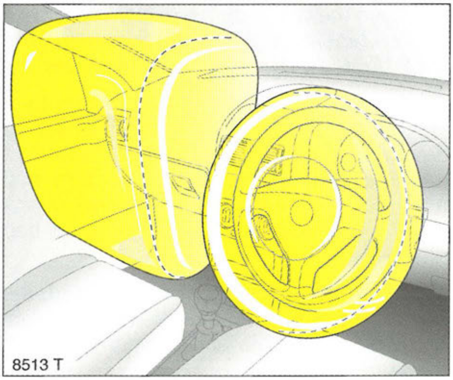
An operating noise may be heard and a small amount of smoke-like gas will be released. The gas is harmless and does not indicate malfunction or fire. The air bags will then deflate; the whole process only taking a moment.

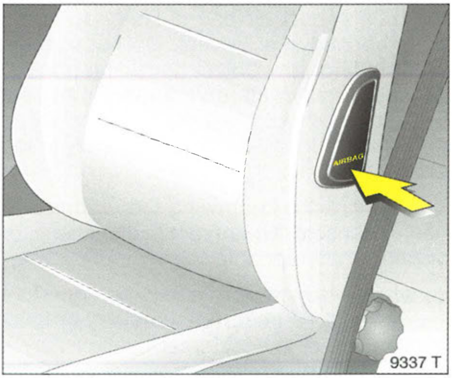
The air bags assist, but do not replace the seat belts. The front air bags are not designed to inflate if the vehicle is hit from the rear or side or the vehicle overturns. Seat belts (by law) should be worn by all passengers whenever the vehicle is moving.

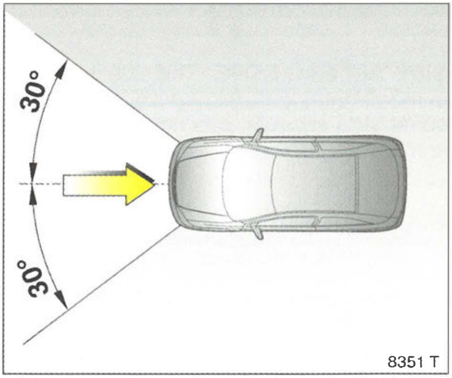
Air bags inflate with great force. If you are too close to an inflating air bag it could seriously injure you. Seat belts help keep you in position for air bag inflation in a crash.

The air bags inflate with extreme rapidity. It is therefore important that the seats are correctly adjusted. Adjust the driver's seat to suit the driver's height so that the driver is sitting upright with slightly bent arms when holding the upper spokes area of the steering wheel. The passenger seat should be as far back as possible, with the back rest upright.

The light on the instrument panel will glow for a few seconds when the ignition is switched ON. This is to indicate that the air bags are operational. If the light does not show when the ignition is switched to on, or if it comes on when driving, you should contact your Holden Retailer, as the air bags may not function correctly, especially in an accident.







Front air bags will inflate if the vehicle is struck hard within the non-shaded section. Front air bags will not inflate if the vehicle is struck from the side, rear, or in some rollovers....always wear a seat belt.

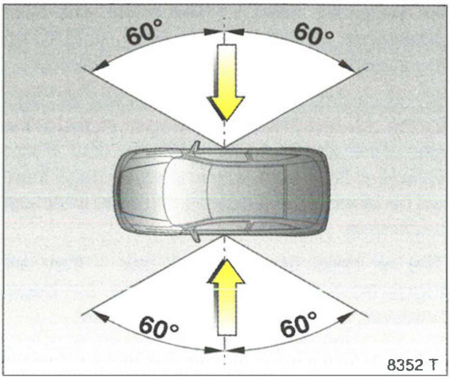
AIR BAGS cont.

After use the whole air bag system will have to be replaced. It is recommended that the work be done by your Holden Retailer.

The system should also be inspected by a Holden Retailer if the steering wheel or dashboard area is scratched, cracked or damaged. Remember that the horn pad must not be covered with adhesive or any other material, as this may hinder air bag operation.

As a passenger's side air bag is fitted, the dashboard area must be kept clear, with nothing around this area or hanging from the sun visor.

If a side impact air bag is fitted, do not fit unauthorised seat covers. Do not position your body or any object (including pillows) between front seats and doors. Front seat occupants should not lean on or sleep against the door. Always sit centrally in the seat.



Side air bags will inflate if the vehicle is struck hard within the non-shaded section. Side air bags will not inflate if the vehicle is struck from the front, rear, or in some rollovers....always wear a seat belt.

The electronics controlling the air bag system and belt pretensioner are located in the centre console. To prevent malfunctions, do not place magnetic objects in the immediate vicinity of the console.

Extensive design and testing has gone into the air bag system. It should however, be treated with respect. Any careless or unskilled interference with the system could lead to its failure or to accidental inflation. Any work to the electrical system, steering column, dashboard area, steering wheel or air bag system should only be carried out by an authorised Holden Retailer.

SIDE AIR BAG NOTE: The side impact air bags (SIAB) will deploy and offer protection in most, but not all, severe side impacts. Because of the limited time available to detect some side impacts, it is not possible to deploy the SIAB in all serious accidents (e.g. some pole impacts).

BULL BAR NOTE: Fitting a bull bar, or making other modifications to the front of the vehicle, may change the impact speed which would normally cause the air bag to inflate, reducing its effectiveness. Bull bars should not be fitted to vehicles operating in suburban areas, as they increase the risk of injury to a pedestrian in the event of a collision. Bull bars are only recommended for country / outback areas, where additional protection from straying animals is required. Please remember that defensive driving and limiting driving speed to the road conditions is always the best approach, particularly where road side signs indicate wildlife is abundant.

AIR BAGS cont.

Passenger air bag and child restraints

WARNING – EXTREME HAZARD:

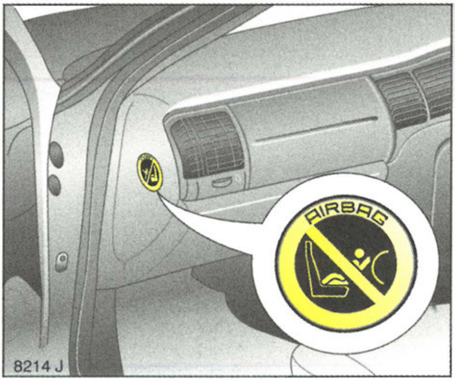
- **DO NOT use a rearward facing child restraint on a seat protected by an air bag in front of it. The child could be seriously injured if the air bag inflates, as the child's head would be very close to the inflating air bag.**
- **NEVER install a child restraint in the front seat of a vehicle fitted with Side Impact Air Bags. Remember that it is safest for children to be seated in the rear seats.**

Do not touch any air bag system components or wires.

The wires can be identified by yellow tape wrapping or yellow tubing and the connectors are also yellow.

Scrapping a vehicle that has an uninflated air bag can be hazardous. Consult your Holden Retailer.

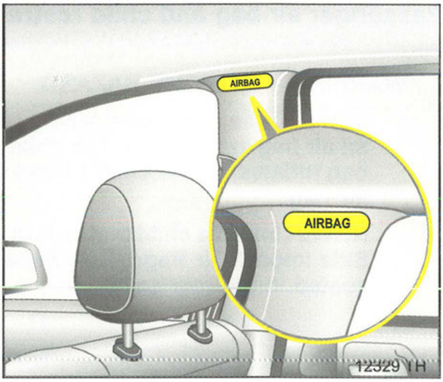
Refer to Chapter 3 for further information about fitting a child restraint.



AIR BAGS cont.

Curtain airbags, if fitted

The curtain airbag system is identified by labels on the roof trim pillars.

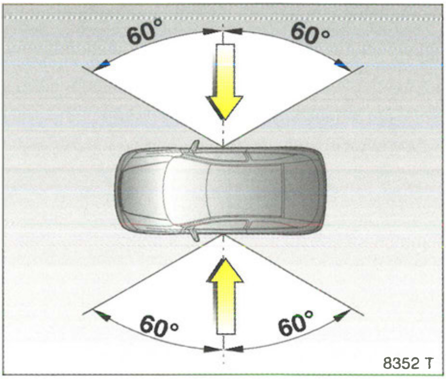


The curtain airbag system comprises:

- an airbag with inflator in the roof frame on both the driver's and front passenger sides,
- the control electronics,
- the side impact sensors,
- the airbag system symbol in the instrument gauges.

The curtain airbag system will be triggered:

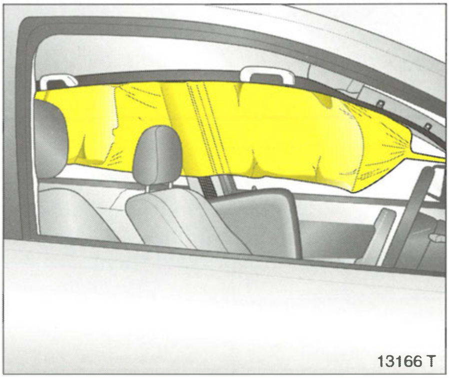
- depending on the type of impact,
- within the range shown in the illustrations on the driver's door or front passenger door,
- together with the side airbag system,
- independently of the front airbag system.



Curtain airbags will inflate if the vehicle is struck hard within the non-shaded section. Curtain airbags will not inflate if the vehicle is struck from the front, rear, or in some rollovers....always wear a seat belt.

AIR BAGS cont.

When triggered, the curtain airbag inflates within milliseconds to form a safety cushion in the head area on the affected side of the vehicle. This substantially reduces the risk of injury to the head in the event of a side-on collision.



WARNING:

- **There must be no objects in the area in which the airbag inflates. Do not place the hands or arms on the covers of the airbag systems.**
- **Use the hooks above the doors only to hang up light articles of clothing. Do not place any objects in the pockets of the hanging items. Do not hold onto the assist handles (above the doors) while seated in the vehicle.**
- **The seat belt must always be correctly fitted.**

The curtain airbag will not be triggered in the event of:

- the ignition is switched off,
- frontal collisions,
- accidents in which the vehicle overturns,
- collisions involving a rear impact,
- collisions involving a side impact outside the passenger area.

The severity of the side impact accident will determine whether the side airbag system needs to be triggered to protect the occupants of the vehicle. The degree of damage to your vehicle and the resulting repair costs alone do not indicate the criteria for triggering of the airbags.

The airbag systems and seat belt tensioners are monitored electronically. Their operational readiness is shown by the symbol on the instrument panel. When the ignition is on, the control indicator lights up for approximately 4 seconds. If it does not go out after 4 seconds or if it lights up while driving there is a fault in the airbag system or seat belt tensioners and you should contact your Holden Retailer as the airbags and or seat belt tensioners may not function correctly in the event of an accident.

After use, the whole airbag system will have to be replaced. It is recommended that the work be done by your Holden Retailer.

Please also read the information on the previous pages relating to airbag systems fitted to your vehicle.

BULB REPLACEMENT

When replacing a bulb, turn off the related switch.

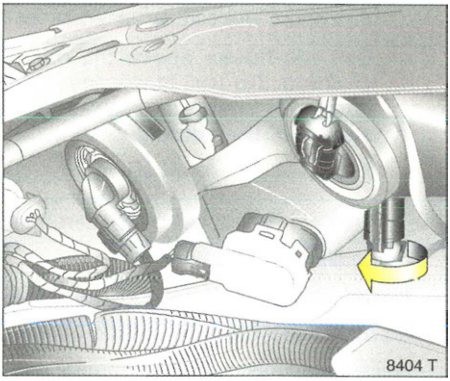
Do not touch new bulbs with bare hands. Greasy fingers cause stains, which evaporate and can result in a dull light. Grease spots on halogen bulbs will, within a short time, lead to bulb failure. Inadvertently stained bulbs may be cleaned with tissue paper, or a clean, non-fuzzy cloth, using alcohol or white spirits.

When replacing bulbs do not exceed the wattage rating on the defective bulb base.

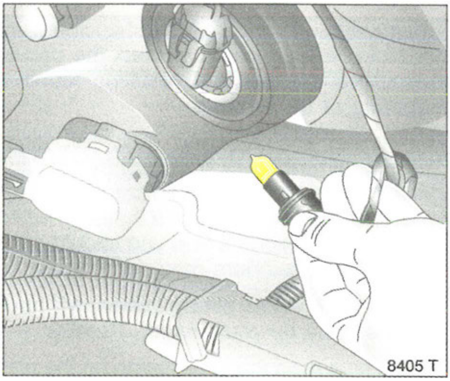
Detailed procedures for headlight aiming are provided in the relevant service manual for your vehicle. However, because headlight aiming is a safety item, it is recommended that you have it carried out by your Holden Retailer. On vehicles fitted with headlight range adjustment, the headlight aiming must be carried out with the headlight switch in position ***0****.*

Halogen headlight system parking lights

1. Open the bonnet and engage the support.
2. Rotate the bulb holder anticlockwise and disengage.



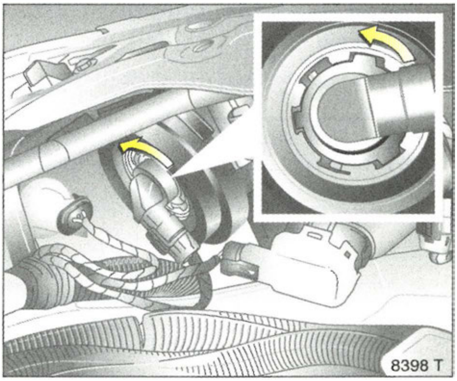
3. Remove the bulb from the holder.
4. Insert a new bulb.
5. Insert the holder into the reflector and engage it by turning clockwise.
6. Check the light operation.



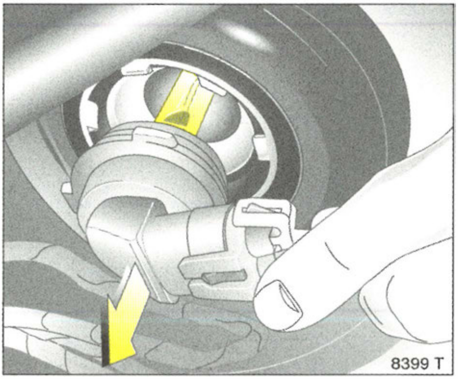
BULB REPLACEMENT cont.

Halogen headlight system low beam

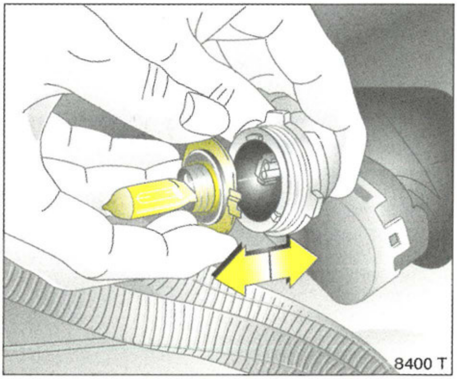
1. Open the bonnet and engage the support.
2. Grip the bulb holder by the plug connector, rotate the holder anticlockwise and disengage it.



3. Remove the bulb holder from the reflector.



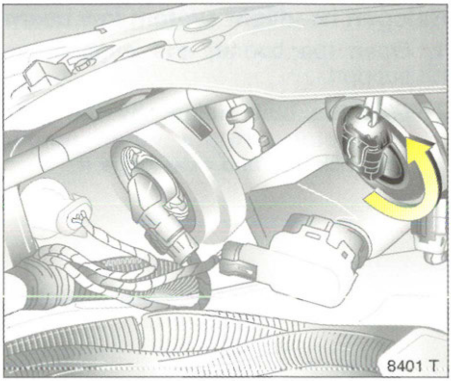
4. Remove the bulb from the bulb holder.
5. Insert a new bulb into the bulb holder without touching the glass.
6. Insert the new bulb and bulb holder so that the two lugs on the bulb holder engage in the recesses in the reflector.
7. Rotate the bulb holder clockwise as far as it will go.
8. Check the light operation.



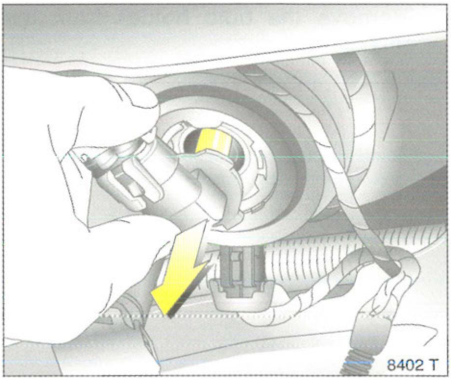
BULB REPLACEMENT cont.

Halogen headlight system high beam

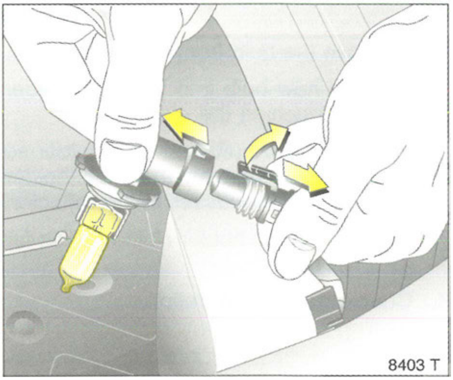
1. Open the bonnet and engage the support.
2. Grip the bulb holder by the plug connector, rotate the holder anticlockwise and disengage it.



3. Remove the bulb holder from the reflector.



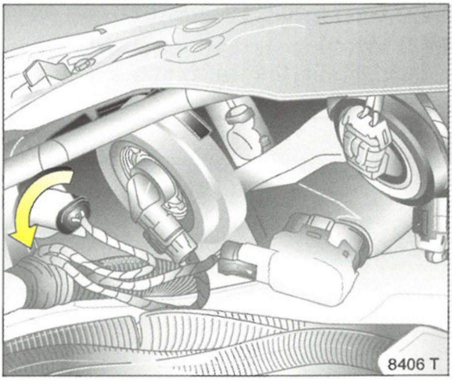
4. Raise the connector retaining clip and detach the connector from the bulb holder.
5. Insert a new bulb into the bulb holder without touching the glass.
6. Insert the new bulb and bulb holder so that the two lugs on the bulb holder engage in the recesses in the reflector.
7. Rotate the bulb holder clockwise as far as it will go.
8. Check the light operation.



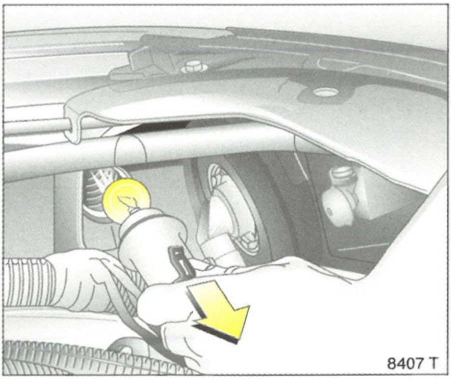
BULB REPLACEMENT cont.

Halogen headlight system front turn signal lights

1. Open the bonnet and engage the support.
2. Rotate the bulb holder anticlockwise and disengage it.



3. Press the bulb into the holder slightly, turn it anticlockwise and remove it.
4. Insert a new bulb and engage the holder into the reflector by turning it clockwise.
5. Check the light operation.



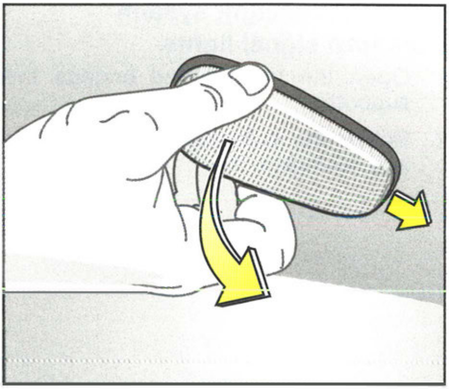
High mounted stop light, front fog lights (if fitted) and instrument lighting

The work should preferably be carried out by a Holden Retailer.

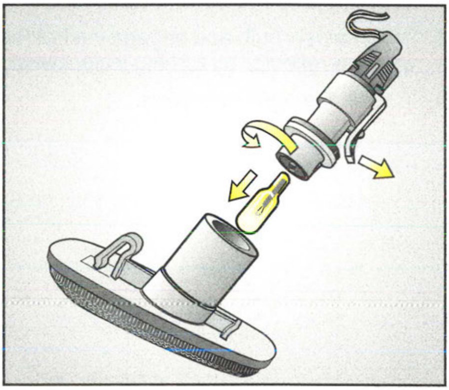
BULB REPLACEMENT cont.

Side turn indicator lights

1. Grasp the lens at the rear, push forwards and pull the lens away from the body of the vehicle.

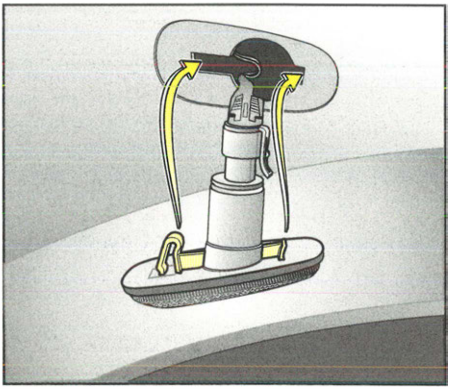


2. Separate the bulb holder from the lens assembly by first rotating the bulb holder anticlockwise.
3. The bulb pulls straight out of the bulb holder.



4. Insert the new bulb into the bulb holder. Install the bulb holder into the lens housing.

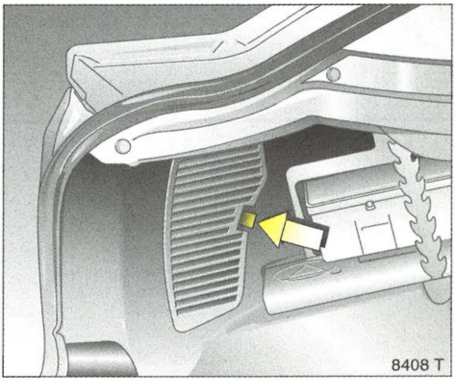
   Note: The bulb holder only fits into the lens housing one way. Therefore, keep turning the bulb holder until it fits into place and can be tightened.
5. When inserting the light, first locate the rear of the housing into the body before pushing the front inwards to engage the clip.
6. Check the light operation.



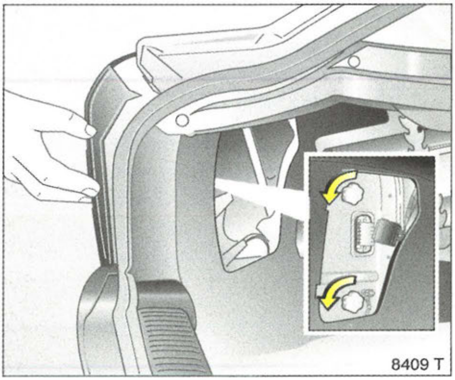
BULB REPLACEMENT cont.

Hatch model: tail, brake, rear turn signal, reverse lights, rear fog lights

1. From inside the luggage compartment, disengage and remove the tail light cover, as illustrated.



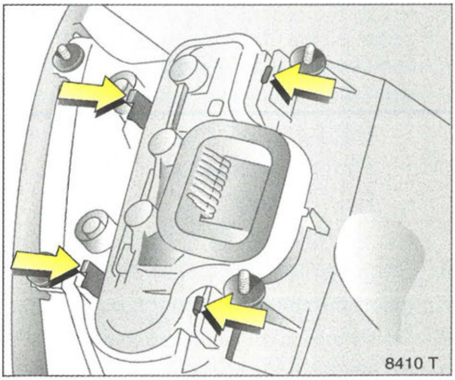
2. Detach the plug connector from the bulb holder.
3. Grip the lens from the outside and unscrew the two nuts.
4. Detach the lens from the vehicle body.



5. Press the retaining lugs on the outside edge of the bulb holder together and remove the bulb holder.

   Bulb sequence from top to bottom:

   - Fog light.
   - Turn signal light.
   - Reverse light.
   - Tail light / brake light.
6. Remove the faulty bulb from the bulb holder.
7. Insert the new bulb into the bulb holder.
8. Install the bulb holder into the lens.

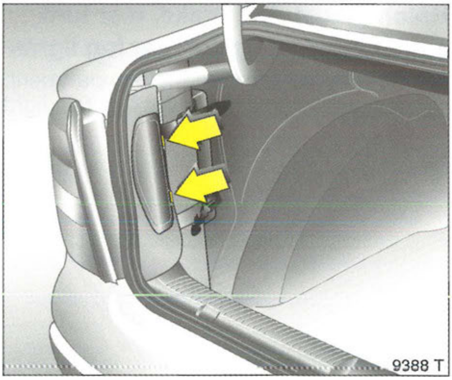


9. Insert the lens into the vehicle's body and screw the nuts onto the stud bolts.
10. Connect the lighting plug connector.
11. Place the tail light cover into position and click into the closed position.
12. Check the light operation.

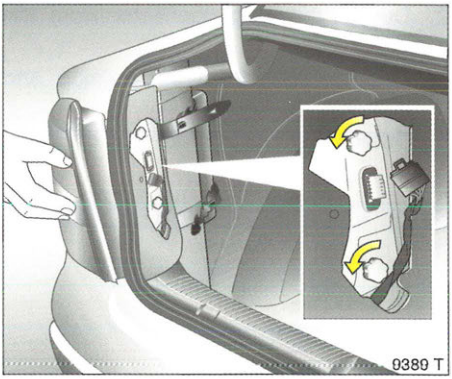
BULB REPLACEMENT cont.

Sedan and convertible models: tail lights, brake lights, rear turn signal lights, reverse lights, rear fog lights

1. From inside the luggage compartment, disengage and remove the tail light cover by pressing the retaining lugs.



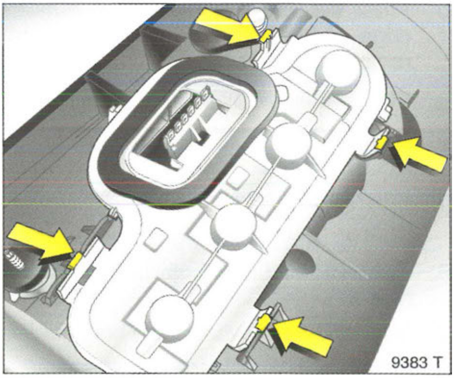
2. Detach the plug connector from the bulb holder.
3. Grip the lens from the outside and unscrew the two nuts.
4. Detach the lens from the vehicle body.



5. Press the retaining lugs on the outside edge of the bulb holder together and remove the bulb holder.

   Bulb sequence from top to bottom:

   - Fog light.
   - Turn signal light.
   - Reverse light.
   - Tail light / brake light.
6. Remove the faulty bulb from the holder.
7. Insert the new bulb into the bulb holder.
8. Install the bulb holder into the lens.
9. Insert the lens into the vehicle's body and screw the nuts onto the stud bolts.
10. Connect the lighting plug connector.
11. Place the tail light cover into position and click into the closed position.
12. Check the light operation.

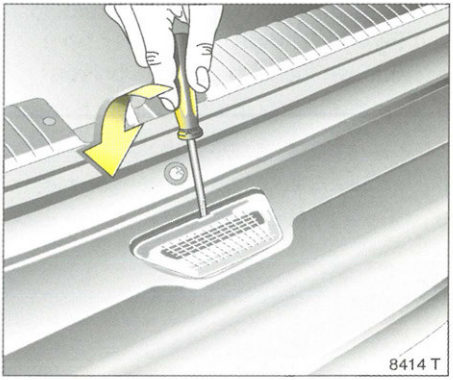


BULB REPLACEMENT cont.

Number plate light

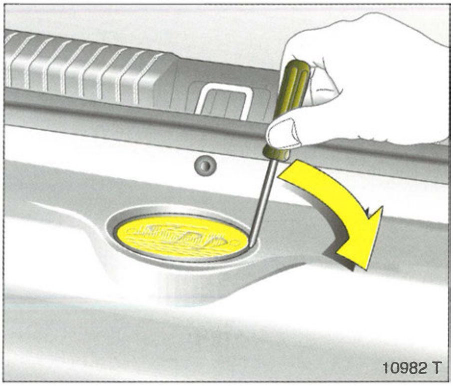
1. Open the luggage compartment.
2. Sedan and hatch:

   Insert a screwdriver into the side of the light as illustrated. Press forward and disengage the spring.



Convertible model:

Insert a screwdriver vertically into the right-hand side of the light as illustrated. Exert light pressure to the right and disengage the spring.

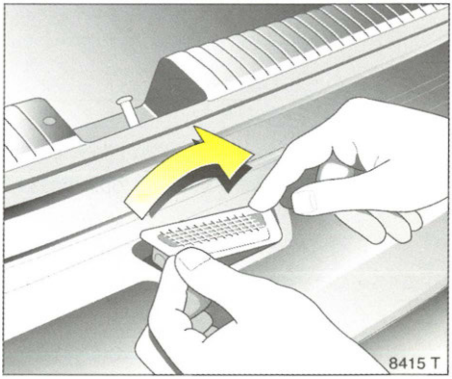


3. Sedan and Hatch:

   Press down on the right hand side of the lens and raise from the left.

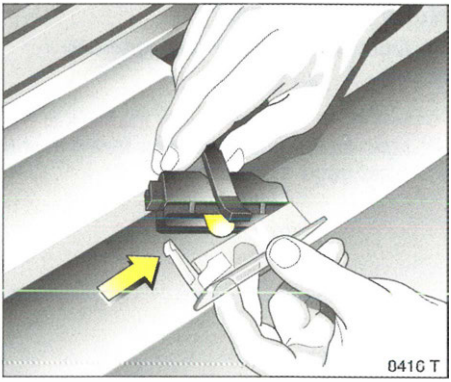
   Convertible model:

   Raise the light insert from the right and lift it out.

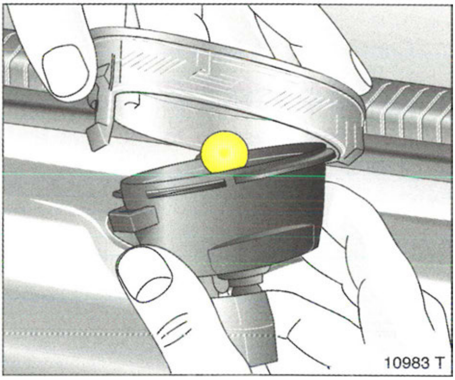


BULB REPLACEMENT cont.

4. Press the protruding tongue and open the light housing.
5. Remove the bulb from the holder.
6. Insert a new bulb into the bulb holder.
7. Install the lens onto the light housing.
8. Install the light into the vehicle's body.
9. Check the light operation.



Sedan and Hatch



Convertible model

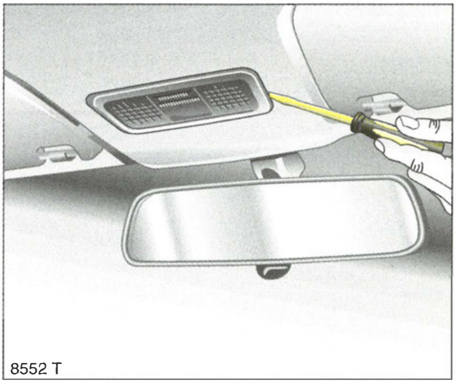
BULB REPLACEMENT cont.

Interior light, rear reading light (if fitted), glovebox light, luggage compartment light

Before removing the bulb, close the doors or ensure that the contact switch is kept pressed so that the light is not live.

1. Gently prise the light out of the recess using a screwdriver.

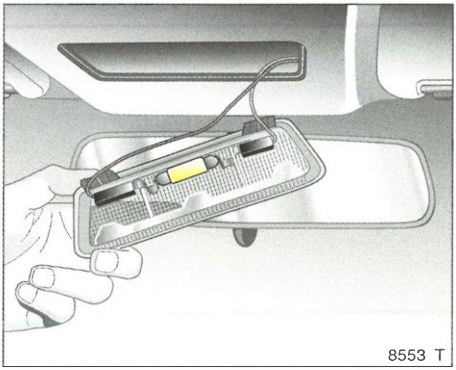
   To access the rear reading light, lever the lens out of the housing.



8552 T

2. Press the bulb slightly towards the spring clip and remove it.

   For the rear reading light, remove the faulty bulb.
3. Insert a new bulb.
4. Install the assembly gently into the recess.
5. Check the light operation.



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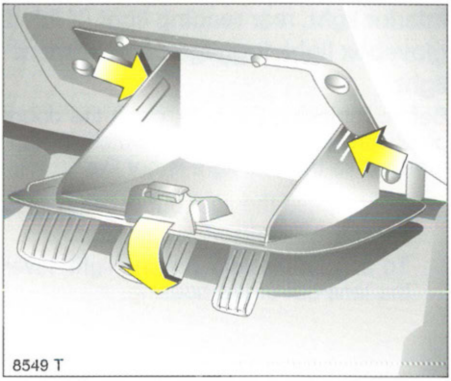
FUSES

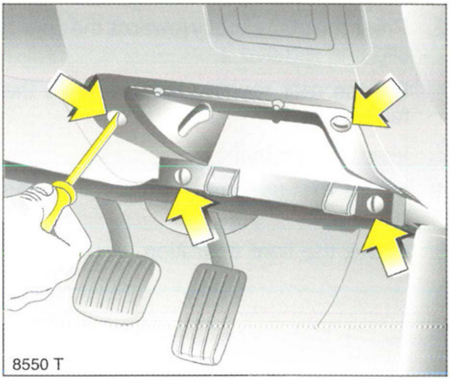


The fuses are located behind the storage compartment, to the right of the steering wheel.

1. Open the storage compartment.
2. Press the lugs at the side of the compartment lid, as illustrated.
3. Swivel the lid down to its full extent.
4. Detach and remove the lid.

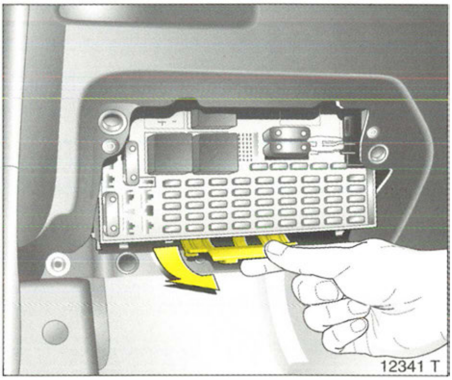
Remove the storage compartment housing

Loosen the screws and remove the storage compartment housing. Fuse numbering is shown on the back of the storage compartment housing.



Replace fuse

To replace a fuse, grip the handle to disengage the fuse box from the lower edge and swivel it forwards.



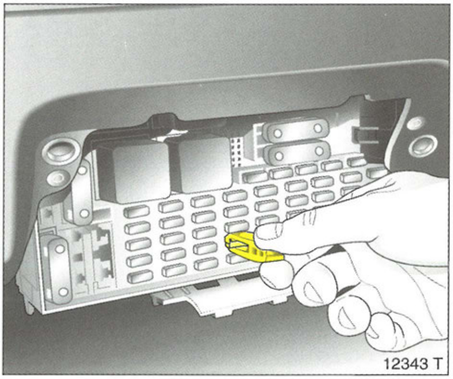
FUSES cont.

It is recommended that a complete set of spare fuses are carried. Provision is made in the fuse box for storing spare fuses.

To help replace fuses, a special fuse gripping tool is provided on the right hand side of the fuse box.

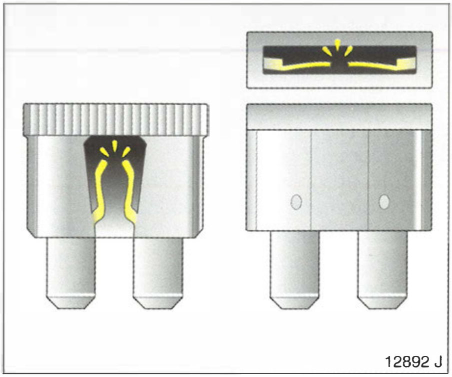
Before replacing a fuse, turn off the respective switch and remove the ignition key.

Slot the fuse gripping tool onto the fuse and withdraw the fuse.



A defective fuse can be recognised by its melted wire. A new fuse should only be installed after the cause of the trouble has been located and eliminated.

Only fuses of the specified rating should be installed. Refer to the following page. The rating is given on all fuses.



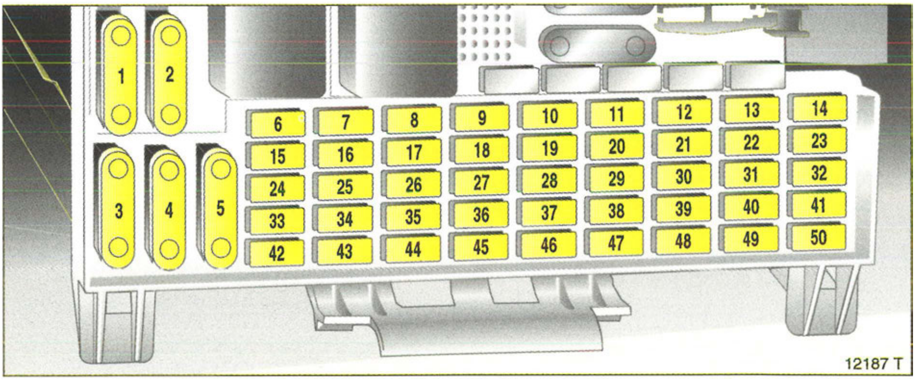
COLOUR	RATING
Grey	2 A
Light brown	5 A
Brown	7.5 A
Red	10 A
Light blue	15 A
Yellow	20 A
Light green	30 A
Orange	40 A

WARNING:

When replacing a fuse, be sure to use a fuse of the specified amperage. Never install a wire or similar device to replace a fuse, as it could damage electrical components and may cause a fire hazard to your vehicle.

FUSES cont.

1	Convertible, folding top	40 A
2	Fan	30 A
3	Heated rear window	40 A
4	–	
5	–	
6	Right low beam headlight, headlight range adjustment	10 A
7	Park and tail lights (right), number plate light	10 A
8	Right high beam	10 A
9	–	
10	Horn	15 A
11	Central locking	20 A
12	Fog lights	15 A
13	Information display	5 A
14	Windscreen wipers	30 A
15	Electric windows, electric mirrors, interior lighting	5 A
16	Rear fog lights	10 A
17	Electric windows	30 A
18	Number plate lamp, Headlight range adjustment, automatic transmission	5 A
19	CD changer	10 A
20	Electric windows	30 A
21	Ignition lock, radio	5 A
22	Hazard warning flashers, information display, trip computer, control indicators	15 A
23	ABS, power steering	10 A
24	Left low beam	10 A
25	Park and tail lights (left), number plate light	10 A
26	Left high beam	10 A
27	–	
28	Courtesy light	5 A
29	Hazard warning flasher, automatic transmission	10 A
30	–	
31	Tailgate wiper	20 A
32	Day time running lights	10 A
33	Terminal 30: Constant current for caravan / trailer	20 A
34	Information display, radio	20 A
35	Automatic transmission, engine cooling, air cond.	10 A
36	Cigarette lighter,	15 A
37	Heated front seats	20 A
38	Brake lights, auto trans information display, cruise control, electronic air conditioning	10 A
39	Auto trans, engine cooling, air conditioning	5 A
40	Engine cooling, air cond	5 A
41	Heated exterior mirrors	10 A
42	Courtesy light	5 A
43	–	
44	–	
45	Seat heating	5 A
46	Ignition system	15 A
47	Stationary heater	20 A
48	Convertible, folding top	2 A
49	Convertible, folding top	2 A
50	–	



CHAPTER 7

Weekly checks

Page
7-2 Miscellaneous checks
7-3 Engine oil level
7-4 Engine coolant level
7-5 Brake fluid levels
7-5 Transmission fluid levels
7-5 Steering fluid levels
7-6 Washer fluid level
7-6 Battery
7-7 Tyres
7-10 Trolley jack
7-10 Hoist locations

MISCELLANEOUS CHECKS

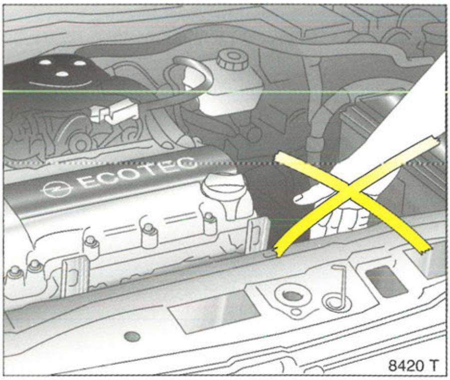
As well as taking your vehicle to be serviced (refer to Chapter 12) there are a few simple weekly checks that the owner / operator is recommended to make. These are shown on the following pages.

The following checks should also be regularly done to ensure proper safety and dependability of your vehicle.

WARNING:

If the engine temperature is high, the cooling fan may remain on for several minutes after turning off the ignition.

The engine cooling fan can start working unexpectedly, even when the engine is not running and the ignition is off.



WARNING:

Electronic ignition systems have a high ignition power. Do not touch the ignition system; this could be highly dangerous.

CHECK:

- That all exterior lights are working and that their appropriate interior indicators light up when in operation.
- Mirrors and glass are clean and not scratched.
- Automatic transmission T-bar indicator correctly lines up next to the gear selected.
- The aim of water on the windscreen or tailgate and condition of the wipers.
- Demister operates.
- Condition and operation of all seat belts (give them a sharp tug to make sure that they will lock when necessary) and check that buckles are clean and operating correctly. Remember that seat belts must never be worn twisted.

ENGINE OIL LEVEL

It is normal for every engine to consume some oil. For this reason the engine oil level should be checked every 500 km or before starting a long trip.

The oil level must be checked with the vehicle parked on level ground and with the engine (which must be at normal operating temperature) switched off. Wait at least two minutes before checking the level to allow the oil to settle. If the engine is cold the oil may take considerably longer to drain back.

To check the level, remove the oil dipstick, wipe it clean and re-insert it as far as it will go. Pause for a second then withdraw the dipstick and look at the oil level on it.

The oil level should be maintained between the two marks (**A** and **B**).

If you need to add oil, use the engine oil specified in Chapter 8 Specifications.

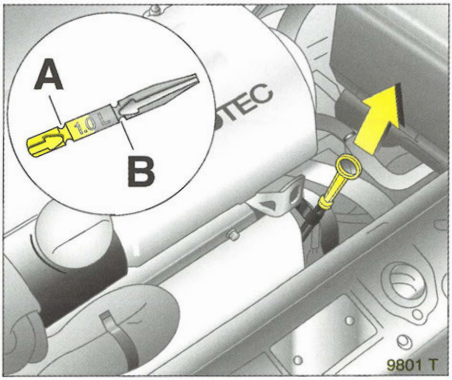
To add oil, undo the cap on top of the engine. Add enough oil to bring the oil level to the top mark. As a guide, the distance between the marks represents 1 litre of oil.

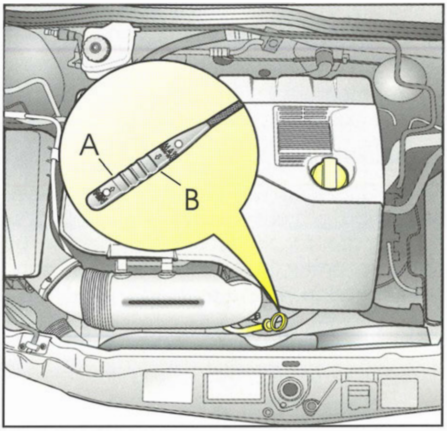
Wait a few minutes for the oil to settle. Then check the oil level again. If still too low, add more oil. If now correct, replace the oil cap and the dipstick. Clean up any spilt oil.

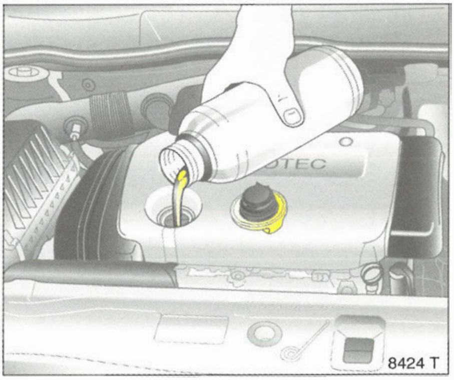
Note: The oil level should not go above the top mark on the dipstick.

Oil consumption should not be judged until the vehicle has run several thousand kilometres. It may take this long for oil consumption to stabilise.

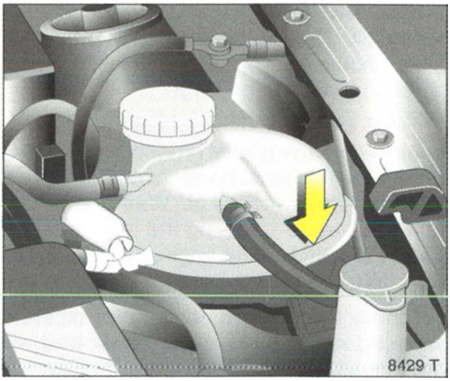
Note: Non-detergent and other low quality oils are specifically not recommended. The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended. Their use will increase costs, may be detrimental to the operation of your vehicle and may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended fluid to have affected the specifications or quality of your Holden vehicle.







ENGINE COOLANT LEVEL



The level of coolant should be checked at least weekly. This is simply a matter of looking at the level in the plastic container when the engine is cold.

The level should be slightly above the KALT / COLD mark when the engine is cold. The level rises when the engine is running and drops again when the engine cools down. If the level falls below the cold mark the coolant should be topped up to a little over the mark.

The coolant for your vehicle is specified in Chapter 8 Specifications.

If topping up, first mix a solution of 50% coolant and 50% water. Failure to use the coolant meeting Holden's specification or maintaining the specified concentration may result in voiding your warranty.

In an emergency, plain water may be used temporarily in the cooling system until the correct coolant is obtained (as soon as possible) from the nearest Holden Retailer.

Remember to replace the coolant cap and tighten it as far as it will go.

Note: Specified coolant contains special corrosion inhibitors for the best corrosion protection of your engine and cooling system. This coolant also gives your cooling system greater hot weather protection by increasing the boiling point and in addition provides protection in cold weather conditions down to –30°C, provided the correct concentration is maintained.

If you need to regularly top up the cooling system, you should see your Holden Retailer.

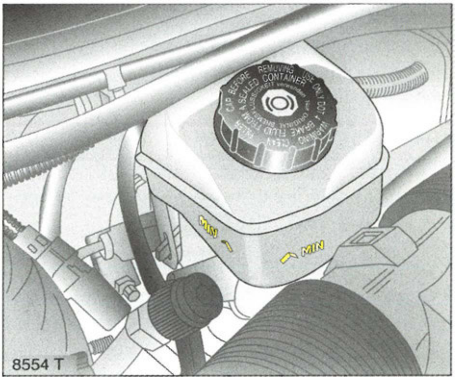
WARNING:

Corrosion inhibitors and antifreeze fluids are poisonous. Use extreme care when handling. If swallowed seek medical attention. Do not remove the cooling system cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which could cause serious burns.

Refer to Chapter 6 if the engine overheats.

BRAKE, TRANSMISSION AND STEERING FLUID LEVELS

Brake fluid level


CLEAN CAP BEFORE REMOVING
USE ONLY DOT 4
WARNING
BRAKE FLUID FROM A SEALED CONTAINER
MIN
MIN
8554 T

WARNING:

Brake fluid is poisonous and corrosive and will damage the paint finish of your vehicle if spilt.

The brake fluid in the master cylinder should be checked weekly. The master cylinder is located in the engine bay, on the driver's side of the vehicle.

The fluid level, visible in the see through master cylinder, should be maintained between the MIN and MAX level markings (shown in the cutout at the side of the master cylinder).

If the fluid is between these levels do not remove the master cylinder cap. Remember that brake fluid exposed to the atmosphere will quickly absorb moisture, which in turn lowers the boiling point of the fluid as well as increasing risk of corrosion of brake components.

If fluid needs to be added, first clean around the cap. Top up with heavy duty brake fluid which is specified in Chapter 8 Specifications.

Remember to secure the cap and clean up any spilt fluid.

Note: Use only new brake fluid. Use of an old, used or inferior brake fluid may endanger the functioning of the brake system.

If the master cylinder requires constant topping up it could indicate that a malfunction exists and you should immediately see your Holden Retailer.

Automatic transmission fluid level (if fitted)

The fluid level for automatic transmission will be checked for you when your vehicle is taken to your Holden Retailer for servicing, refer to Chapter 12. The automatic transmission fluid level does not require checking by the driver in between these scheduled services.

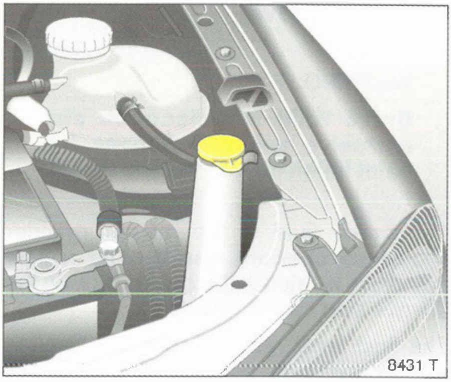
Power steering fluid level

The fluid level for power steering will be checked for you when your vehicle is taken to your Holden Retailer for servicing, refer to Chapter 12. The power steering fluid level does not require checking by the driver in between these scheduled services.

Special Pentosin fluid is required for the power steering system in this vehicle.

WASHER FLUID LEVEL AND BATTERY

Washer fluid level



As the washer fluid is constantly used, the level should be checked weekly and topped up as required.

The washer container is for both the windscreen and hatch tailgate washers.

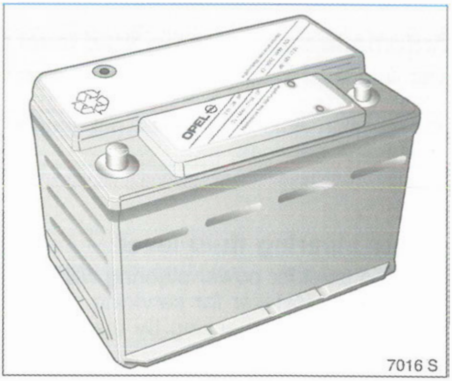
The washer fluid container is located under the bonnet, near the battery.

To fill the reservoir, open the flip top cap.

For a crystal clear windscreen, use a small amount of cleaning fluid (refer to Chapter 11 for the part number) from your Holden Retailer. Do not use ordinary soap or detergent as these not only froth up but will damage the wiper rubbers.

Remember to secure the cap after filling.

Battery

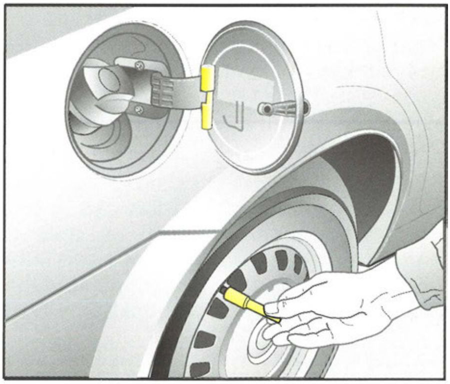


Your vehicle is fitted with a maintenance free battery, which means that the fluid level does not need to be checked.

Note: Never disconnect the battery when the engine is running.

If removing the battery for recharging, first disconnect the negative cable, then the positive cable. Never charge the battery while it is still connected to the vehicle. When connecting the battery, first connect the positive cable to the positive post, and then connect the negative cable to the negative post.

TYRES



Tyre air pressure

Weekly checking of the air pressure of your tyres (including the spare) ensures your safety, as well as reducing fuel consumption and increasing the life of your tyres.

For constant long distance or rough road travelling, daily checking is recommended.

For correct pressure for your tyres, refer to the tyre placard, on the inside of the fuel filler flap.

If the vehicle is heavily loaded the recommended pressure for the tyres is increased (refer to the tyre placard on your vehicle). As the tyres are operating under greater load the weekly air pressure check becomes even more important.

Tyre inflation pressure increases when the tyres have been driven more than 2 km. The pressure should be checked when the tyres are cold (stationary for over 3 hours). If they must be checked immediately after driving, increase the pressure shown on the placard by 10%. Refer to Chapter 8 for the location of the tyre placard.

The inflation pressure in the tyres should be increased according to the load on the vehicle. Therefore, if the vehicle is loaded to half the maximum payload (as shown in Chapter 10) then the tyres should be inflated half way between the minimum and maximum pressures given on the tyre placard. Vehicles driven for prolonged periods over rough roads, particularly in outback conditions, should use the cold tyre inflation pressure on the tyre placard for maximum load condition.

Always use a tyre pressure gauge to check the tyres – looking at the tyres is not sufficient.

If the pressure is too low, this can result in considerable tyre warm-up and internal damage, leading to tread separation and even to tyre blowout at high speeds.

If the pressure is too high, this can result in reduced traction, increased risk of tyre blowout and poor tyre wear.

Remember to put back any valve dust caps or extensions, if so equipped. This stops dirt and moisture from fouling the valves.

Use the valve cap wrench to make unscrewing the valve caps easier. The wrench is located on the inside of the fuel filler flap.

When checking the tyre air pressure, take a look at the condition of the tyre tread and inspect for stones or abnormal wear.

Alignment and balance

Improper wheel alignment can cause the tyres to wear faster and unevenly. It can also cause the vehicle to pull to the left or right.

Out-of-balance wheels and tyres can cause annoying vibration and uneven tyre wear such as cupping and flat spots.

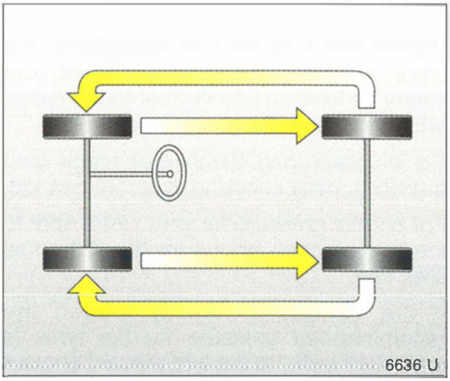
If you have any reason to suspect that either of the above problems exist then have a wheel alignment and balance check done by your Holden Retailer.

TYRES cont.

Tyre inspection and rotation

Front and rear tyres perform different jobs and can wear differently depending on the types of roads driven, your driving habits, wheel alignment and balance, tyre pressures etc.

Tyre condition will be checked for you when you take your vehicle to be serviced by your Holden Retailer, who will be able to diagnose any unusual signs of wear. If the wheels are rotated, it is recommended that the balance be checked at the same time.



Heavy treads

Caution must be exercised when using tyres with heavy treads, including tyres designed to gain traction in bad weather conditions. At sustained high speeds, this type of tyre will run at higher temperatures than standard tyres and consequently should only be operated within the limits recommended by the manufacturer.

Any doubts concerning the fitness of the tyres on your vehicle for the purpose you require should be referred to your Holden Retailer.

Wheel replacement

When replacing wheels for any reason, ensure that the new wheels are equivalent in diameter, rim width, offset and mounting configuration to those originally installed in your vehicle.

Note: Replacing your factory fitted wheels and tyres with non-specified wheels and tyres may affect your warranty as well as your motor vehicle insurance policy.

Tyre traction

WARNING:

A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other material is on the road surface. Driving practises and speed should be adjusted to the road conditions.

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as aquaplaning, may cause partial or complete loss of traction, which adversely affects control and stopping ability. To reduce the possibility of traction loss, the following precautions should be observed.

1. Reduce speeds during rainstorms, when roads are slushy or if the road has standing water or puddles.
2. Replace tyres when tread wear indicators are visible.
3. Check that tyres are properly inflated.

TYRES cont.

Tyre replacement and repair

WARNING:

Do not mix different tyre construction types, such as radial and cross ply, on your vehicle except in emergencies, because your vehicle's handling could be affected and may result in loss of control.

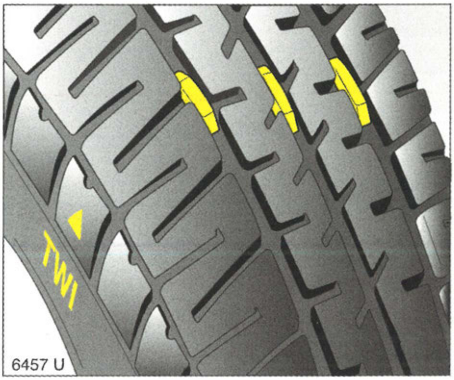
When replacing tyres you should use the same size, load rating and construction type as the original tyres on your vehicle. Refer to the tyre placard on your vehicle for tyre size and load rating. Using a different size or type of tyre may affect such things as ride, handling, speedometer / odometer calibration, ground clearance and tyre clearance to the body or chassis.

Tyres with a higher speed rating and / or maximum load rating in excess of that listed are also acceptable as replacements provided they are fitted to a suitable rim size.

New tyres should be fitted in pairs to the front. If replacing only one tyre, it should be paired on the same axle with the least worn of the other three.

You should replace your tyres when:

1. The tyres are worn to the point where the tread wear indicators, as shown, appear or the cord or fabric is showing.
2. The tread or side wall is cut, split, or cracked deep enough to expose the cord or fabric.
3. The tyre has a bump or bulge in it, indicating some kind of internal damage.
4. The tyre has a puncture, cut or other damage which cannot be repaired because of the size or location of the damage.



If in doubt about the extent of damage to the tyre, have it removed from the wheel and examined by a tyre specialist.

If a pressure loss occurs while driving, do not attempt to drive on the deflated tyre more than is necessary to stop safely. Driving even a short distance on a deflated tyre can damage it and the wheel beyond repair.

When an object which has punctured the tyre is removed, repairs are to be made in accordance with the tyre manufacturer's recommendations.

WARNING:

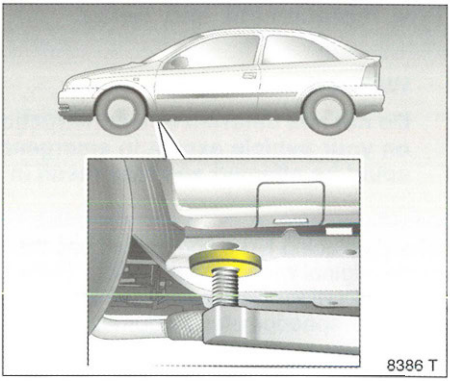
Tyres which have been repaired or retreaded cannot be operated safely at high speeds. Therefore, their use is not recommended.

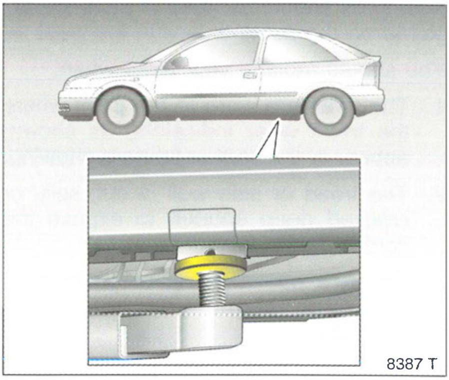
TROLLEY JACK / HOIST LOCATIONS

You should always use the jack locations shown in Chapter 6 when using the original jack supplied with your vehicle. This jack has been designed to correctly and safely lift your vehicle, provided the warnings in Chapter 6 are observed.

However, if using a trolley jack or hoist to raise the vehicle, it is important that the trolley jack or hoist be positioned as shown.

When using lifting or jacking equipment with metal jaws, use a rubber pad to avoid damage to the vehicle.





CHAPTER 8

Specifications

Page

8-2 Specifications
8-4 Identification labels

SPECIFICATIONS

Engine type	**Z18XE, 16 valve**	**Z22SE, 16 valve**	**Z20LET, 16 valve**
Piston displacement	1796 cc	2198 cc	1998 cc
Compression ratio	10.5:1	10.0:1	8.8:1
Bore	80.5 mm	86.0 mm	86.0 mm
Stroke	88.2 mm	94.6 mm	86.0 mm
Power kW @ r.p.m.	92 @ 5,600 *	108 @ 5,800 *	147 @ 5,400 *
Torque Nm@ r.p.m.	170 @ 3,800 *	203 @ 4,000 *	250 @ 1,950 *
Oil specification	ACEA Service classification A2 or A3. viscosity grade 15W-40 or 15W-50		
Refill oil capacity (including filter)	4.25 litres	5.0 litres	4.25 litres
Fuel tank capacity	52 litres	52 litres	52 litres
Coolant capacity	6.5 litres	6.8 litres	7.4 litres
Coolant spec	50% water and 50% Extended-life anti-freeze coolant conforming to GM6277M specification		
Brake fluid	J1703, DOT 4		
Battery specification	12 volts, 55 amp hours	12 volts, 66 amp hours	12 volts, 55 amp hours
Battery for remote control	CR 20 32		

* Non-turbo engines have been developed for operation on regular, unleaded (91 RON) fuel. Slightly improved performance can by achieved when the engines are operated on premium unleaded (95 RON) fuel. Turbo engines have been developed for operation on premium, high octane unleaded petrol (95 RON). Power and torque figures are quoted on 95 RON.

SPECIFICATIONS cont.

Transmission	5 speed manual transmission (CR 3.74)	4 speed automatic transmission	5 speed manual transmission (SR 3.95)	5 speed manual SRi / convertible turbo transmission (SR 3.63)
Transmission Fluid type	Gear oil, meeting Holden spec. no. HN2354 (Castrol SMX-O or equivalent)	Auto trans fluid meeting Holden spec. no. HN2287 (Esso JWS 3305G)	Gear oil, meeting Holden spec. no. HN2354 (Castrol SMX-O or equivalent)	Gear oil, meeting Holden spec. no. HN2354 (Castrol SMX-O or equivalent)
Clutch fluid type	Heavy duty brake fluid, DOT 4, SAE spec. J1703	–	Heavy duty brake fluid, DOT 4, SAE spec. J1703	Heavy duty brake fluid, DOT 4, SAE spec. J1703

Dimensions		**Hatch**	**Sedan**	**Convertible**
Overall length		4,110 mm	4,252 mm	4,267 mm
Overall width, inclucing mirrors		1,967 mm		
Overall height, at curb weight		1,425 mm		
Track	Front	1,464 mm with 15", 16" and 17" wheels		
		1,484 mm with 14" wheels		
	Rear	1,452 mm with 15", 16" and 17" wheels		
		1,472 mm with 14" wheels		
Wheel base		2,614 mm (at curb)		
		2,606 mm (at Gross Vehicle Mass)		

IDENTIFICATION LABELS

Emission label

This label shows the relevant tune-up information required to maintain minimum exhaust emissions and is located on the underside of the bonnet.

Engine number

Individual identification numbers are stamped onto the engine, near the engine oil dipstick.

Safety compliance plate

The safety compliance plate is located inside the engine bay, on the fire wall.

Tyre placard

The tyre placard is located on the inside of the fuel filler flap.

Holden Identification Plate (if fitted)

The Holden number on the Holden Identification Plate is used for warranty identification and Roadside Assistance identification. The plate is located on the passenger side of the radiator support panel.

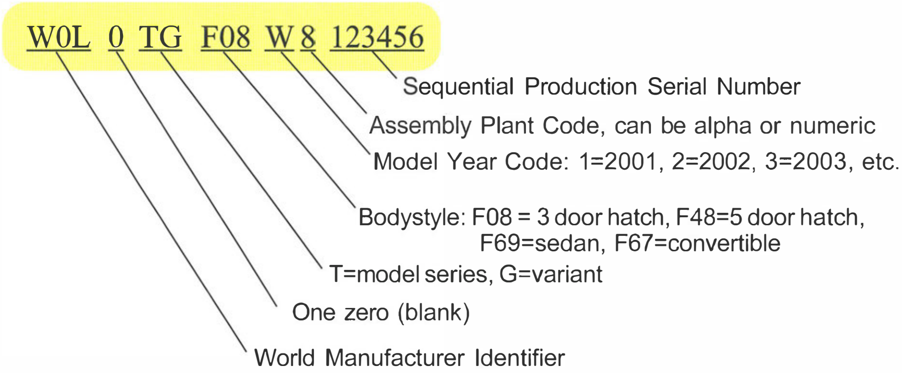
Vehicle Identification number stamp

This stamp shows the International Standards Organization Vehicle identification Number (I.S.O.V.I.N.), which should be used for identification with spare parts. Refer to following page for a breakdown of the I.S.O.V.I.N. number. The number is stamped onto the sill inner panel, under a cover, at the right side of the driver's seat.

IDENTIFICATION LABELS cont.

Vehicle identification number (I.S.O.V.I.N.)

The individual I.S.O.V.I.N. (example below) appears on the Safety Compliance Plate, on the fire wall in the engine compartment. This number is used for identification of parts.


W0L 0 TG F08 W 8 123456
Sequential Production Serial Number
Assembly Plant Code, can be alpha or numeric
Model Year Code: 1=2001, 2=2002, 3=2003, etc.
Bodystyle: F08 = 3 door hatch, F48=5 door hatch, F69=sedan, F67=convertible
T=model series, G=variant
One zero (blank)
World Manufacturer Identifier

CHAPTER 9

After Sales

Page

9-2 New vehicle warranty certificate
9-4 Parts and accessories warranty
9-5 Warranty questions and answers
9-8 Roadside assistance
9-10 Customer assistance
9-11 For New Zealand Holden owners
9-12 Australian Holden retailers
9-28 New Zealand Holden retailers

Note: Retailer names and details may change after the printing of this Handbook. The list contains both Authorised Holden Retailers and Authorised Holden Service Operations.

NEW VEHICLE WARRANTY CERTIFICATE

New Vehicle Warranty application

This Warranty is given by Holden Ltd ABN 84 006 893 232, ('Holden'). The Warranty applies to the vehicle identified on the inside front cover of this Owner's Handbook. It is provided to the original and subsequent owners / operators driving the vehicle within Australia during the Warranty Period. This Warranty is given in addition to all rights conferred by law on that person.

Australian vehicles

This Warranty is only applicable to vehicles purchased and operated in Australia.

Owners of vehicles purchased in Australia but operated overseas should consult the local Retailer in the country of operation about any Warranty applicable to their vehicle. This Warranty does not apply for Holden vehicles exported overseas. Similarly, this Warranty is not provided for vehicles purchased overseas and imported into Australia.

Repairs covered

Subject to the exclusions shown on the following page, this Warranty covers the correction, during the Warranty Period, of any vehicle defect related to materials or workmanship and advised to a Holden Retailer or Authorised Service Outlet, by repair or at Holden's option by replacement.

100,000kms
3
years

Warranty Period

The coverage commences from the date of delivery (or in the case of a demonstrator vehicle the date when the vehicle was first placed into service by the Retailer). The coverage expires at the end of the period of 3 years after the commencement date or after the vehicle has travelled 100,000 kilometres, whichever occurs first.

No charge

Warranty work undertaken (including parts and labour) will be carried out at no cost to the vehicle owner. However, this work should not be confused with servicing specified in the Maintenance schedule in Chapter 12 of this Owner's Handbook for which a charge is payable.

NEW VEHICLE WARRANTY CERTIFICATE cont.

Warranty exclusions

- **Damage**

Your Warranty does not extend to the following damage: Damage caused by an accident, fire, theft or moving objects striking the vehicle.

Damage caused by industrial fallout, chemicals or sealants. Damage caused by atmospheric fallout or flood, hail, salt, etc.

- **Maintenance items**

Services such as, brake adjustment, replacement of filters, wiper rubbers etc, which are required as part of normal vehicle maintenance, refer to Chapter 12.

Manufacturer

- **Tyres**

The tyres (and tubes where applicable) fitted to your vehicle are not covered by this Warranty. However, they may be covered by the tyre manufacturer.

- **Batteries**

Batteries are warranted for 12 months.

- **Misuse**

The warranty does not cover damage caused by:

(a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc, or neglect,

(b) operation of the vehicle after the defect is known,

(c) failure to carry out proper maintenance services,

(d) use of incorrect types and grades of fuel, oil or lubricants,

(e) alteration of the vehicle by anyone not authorised by Holden,

(f) fitting of parts or accessories not recommended by Holden,

(g) any work carried out on the vehicle by anyone except a Holden Retailer or authorised Service Outlet.

PARTS AND ACCESSORIES WARRANTY

Holden warrants Holden approved Parts and Accessories ('Parts' and 'Accessories') for the periods and on the conditions set out below. The Warranty covers the correction, during the relevant Warranty Period, of defects in any such Parts and Accessories, by repair or at Holden's option by replacement.

- **Accessories installed onto the new vehicle**

  Holden approved Accessories installed by a Holden Retailer or authorised Service Outlet to the new vehicle at the time of purchase are covered together with the New Vehicle warranty for the period of 3 years or 100,000 km, whichever occurs first.

- **Parts and Accessories installed after new vehicle delivery by a Holden Retailer or authorised Service Outlet**

  Parts and Accessories are covered for 2 years or 50,000 km (whichever occurs first). If the vehicle is still within the New Vehicle Warranty the Parts and Accessories are covered by the longer of:

  2 years / 50,000 km (whichever occurs first)

  or

  the end of the New Vehicle Warranty.

  As an example, an Accessory installed in a 7 month old vehicle would be covered until the end of the New Vehicle Warranty; an Accessory installed in a 2½ year old vehicle would be covered until the end of 4½ years or a further 50,000 km from when the Accessory was installed.

- **Purchased at retail or trade**

  Parts and Accessories purchased at trade or retail and installed by other than a Holden Retailer or authorised Service Outlet are warranted for 1 year from the date of purchase. Please keep a receipt to support warranty claims.

  The Warranty does not cover the labour costs of removal / installation of Parts and Accessories when installed or rectified by other than a Holden Retailer or authorised Service Outlet.

- **Parts and accessories warranty exclusions**

  The tyres (and tubes where applicable) are not covered by this warranty. However, they may be covered by the tyre manufacturer.

  Batteries are warranted for 12 months from date of purchase.

  Parts which are required as part of normal vehicle maintenance are warranted against manufacturing defect at the time of installation. Consult your Holden Retailer to confirm the period of this warranty.

WARRANTY QUESTIONS AND ANSWERS

This section is designed to assist you in understanding the Holden Warranty provided with your new vehicle.

The following are some of the most frequently asked questions, for which detailed answers are provided.

Q 1. How do I go about obtaining Holden Warranty service?

It is the responsibility of the Holden Selling Retailer to provide Holden Warranty service, therefore you should take your vehicle to the Holden Selling Retailer whenever Holden Warranty service is needed. However, if this is not possible, you may go to any other Authorised Holden Retailer. The details recorded inside the front cover of this handbook will be required by the Holden Retailer.

Q 2. What should I do if my vehicle becomes unsafe or inoperative as a result of a defect which is covered by the Holden New Vehicle Warranty?

You should contact the nearest Authorised Holden Retailer or Holden Customer Assistance Service (refer further in this Chapter) as soon as possible, and arrange for that Retailer to carry out the required Holden Warranty Service.

Q 3. What should I do if, in an emergency, Holden Warranty service is required and an Authorised Holden Retailer is not available to provide such service at the time?

If, in an emergency, a repair, replacement or adjustment (covered by the Holden New Vehicle Warranty) is required to enable your vehicle to be operated safely and it is not practical for you to go to an Authorised Holden Retailer, the service (to the extent that it is necessary to enable your vehicle to be operated safely) may be performed by any other qualified mechanic or repairer. A claim for the reasonable cost may be made through the Authorised Holden Retailer who would normally provide you with Holden Warranty Service. You must also take your vehicle to the Authorised Holden Retailer for inspection of the service and / or completion of any required Holden Warranty service, as soon as possible.

Note: During normal business hours you should seek authorisation from your nearest Authorised Holden Retailer or Holden Customer Assistance Service, prior to repairs being commenced.

Q 4. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden Warranty?

No, these items are not covered. Holden warranty only covers the repair, replacement or adjustment of those parts of your vehicle which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your vehicle, will be recognised under the Holden New Vehicle Warranty.

You may have rights under the law to claim compensation outside of the Holden New Vehicle Warranty, but any claim based on those rights should be separately pursued.

WARRANTY QUESTIONS AND ANSWERS cont.

Q 5. Will I have to pay for maintenance costs during the Warranty Period?

Maintenance costs are not covered by the Holden New Vehicle Warranty. The Maintenance Schedule in Chapter 12 specify the *minimum* maintenance required for your vehicle operating under normal conditions.

The Maintenance items (except where they are required as a result of defects in materials or workmanship) for which you will have to pay include:

- Engine tune-up, including spark plugs replacement.
- Replacement of all filters, engine and other belts, hoses, wiper blades, clutch linings.
- Cleaning or flushing of fuel, coolant, brake, engine, transmission, differential, power steering etc, after 1,500 km.
- Carbon and sludge removal.
- Maintenance servicing of emission control system devices.
- Adding to (or replacing) lubricants.
- Adding to (or replacing) air conditioning refrigerant, after 1,500 km.
- Any necessary adjustments to drive belts, transmissions, clutch, park brake etc.
- Wheel balancing - after 5,000 km.
- Wheel alignment.
- De-dusting or de-glazing of brake linings or pads - after 1,500 km.
- Brake lining wear or damaged brake components due to lining wear.
- Clutch lining wear or damaged clutch components due to lining wear.
- Battery recharging.
- Paint, bright metal finish and trim, due to normal deterioration.
- Body panel adjustment – after 1,500 km.
- Door, or bonnet lock adjustments.
- Glass or channel adjustments – after 1,500 km.
- Body rattle, squeaks and general tightening of bolts, fasteners and fittings – after 1,500 km.
- Chipped glass or breakage.
- Torn or damaged floor mats or carpets.
- Normal wear and tear to trim components.

Q 6. Are my tyres covered by the Holden New Vehicle Warranty?

No. The tyres fitted to your vehicle are covered by a separate warranty provided by the tyre manufacturer. Any Authorised Holden Retailer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturer's representative.

WARRANTY QUESTIONS AND ANSWERS cont.

Q 7. Will I have to pay for any costs or expenses in connection with the provision of Holden Warranty service?

All parts and labour used in carrying out Holden Warranty service at the premises of the servicing Holden Retailer are free of charge. Whenever Holden Warranty service is to be carried out by the servicing Holden Retailer it is your responsibility to deliver your vehicle to the servicing Holden Retailer's premises.

If, as a result of a defect which is covered by the Holden New Vehicle Warranty, your vehicle cannot be driven safely and you arrange for the nearest Authorised Holden Retailer to carry out the required Holden Warranty service, Holden will accept reasonable towing costs to move your vehicle to the nearest Holden Retailer's premises. Before employing a towing company, contact the nearest Holden Retailer and / or Holden Customer Assistance Service (refer to page 10 of this Chapter) to obtain guidance.

Q 8. Would my vehicle's engine benefit from fuel additives, oil additives or coolant additives not marketed by Holden?

The use of break-in oil, tune-up compounds, friction-reducing compounds and other supplemental additives is not recommended; their use will not only increase operating costs, but may also be detrimental to the operation of your vehicle and can affect the validity of your vehicle warranty.

Only the fluids and lubricants referred to in this handbook should be used.

UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN PRODUCTS

No Holden Retailer or other person is authorised or permitted to give or make any statement, assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden product or in connection with the supply of any Holden product, which is at variance with any written statement, assertion or undertaking on any of these subjects given or made by Holden in its published sales literature, and Holden does not accept any responsibility for such unauthorised action.

ROADSIDE ASSISTANCE

3 YEAR
24 HOUR ROADSIDE ASSISTANCE

Our commitment to your satisfaction

Holden's Roadside Assistance is part of the unequalled commitment by Holden to provide total motoring satisfaction.

From the moment delivery is made, our aim is to provide the finest possible ownership experience, from design through manufacturing to servicing and now beyond to the open road, Australia wide.

We hope the need never arises, but if it does, we'll be there to help through Holden Roadside Assistance.

How does Holden Roadside Assistance work?

Holden Roadside Assistance is provided by Holden Ltd and delivered by the collective resources of the Australian Automobile Clubs and Associations including the constituents of Assist Australia (AA).

Which vehicles are covered by the service?

As of 1st November 1993 all new Holden passenger and light commercial vehicles are covered for 36 months from the date of first registration.

Holden Roadside Assistance is extended to private and business vehicles, taxis, rental companies, all government and fleet operators.

What will Holden Roadside Assistance do for me?

Holden Roadside Assistance is designed to get you mobile on any road that is trafficable to normal two wheel drive vehicles. In the event of the unexpected happening, from your keys being locked in your vehicle to mechanical and accident advice, help is readily available by simply calling the toll free number 1800 817 100.

All Holden luxury vehicles receive the added benefits of Holden Roadside **Ultra** Assist which includes accommodation, alternative transport, rental vehicle, assistance in case of accident, theft and medical emergency and Australia wide vehicle recovery.

Can I upgrade to Roadside Ultra assist?

Yes, owners can upgrade to Holden Roadside **Ultra** Assistance for a fee by dialling 1800 645 668. To request a copy of the Ultra terms conditions, contact the toll free Customer Assistance Service Line on 1800 033 349.

ROADSIDE ASSISTANCE cont.

When do the benefits begin?

Cover begins from the date of first registration. An interim card entitles you to immediately receive all the benefits of Holden Roadside Assistance.

Where can I get Roadside Assistance?

Holden Roadside Assistance is available to you at home, or at the roadside, anywhere in Australia, should you need it. In remote or sparsely populated areas you may experience delays in obtaining Roadside Assistance due to your location, the availability of the service provider and accessibility.

Is there a membership or joining fee?

No, Holden Roadside Assistance is complimentary with every new Holden passenger vehicle and light commercial vehicle for 36 months from the date of first registration.

What will Holden Roadside Assistance cost me?

Materials, fuel and spare parts must be paid for at the time of service. The service personnel attending will issue a receipt for these expenses. Reimbursement of expenses covered by Holden's warranty can be claimed by contacting your local Holden Retailer.

What happens if I sell my vehicle?

Holden Roadside Assistance stays with the vehicle, so if you sell your vehicle during the 36 month period, it is still eligible for the balance of the Holden Roadside Assistance. The new owner simply registers for the service by using the change of ownership form supplied in the Roadside Assistance booklet.

How do I call for assistance?

Simply call Holden Roadside Assistance toll free on 1800 817 100 from anywhere in Australia. For further information regarding the service and full terms and conditions, refer to the Roadside Assistance Kit in the glovebox or call the toll free Customer Assistance Service Line on 1800 033 349.

CUSTOMER ASSISTANCE

We want you to be happy with your new vehicle, together with the people you deal with while you have the vehicle.

Normally, any problems with the sales, operation, servicing or the validity of original equipment supplied with your vehicle will be handled by your Holden Retailer's Sales and Service Department.

We realize however, that, with the best intentions, misunderstandings do occur sometimes.

☞ Therefore, we suggest you discuss any concern with one of the Holden Retailer's management people. If you haven't received satisfaction from the Sales Manager or Service Manager – go to the General Manager or to the Retailer Principal.

By now you should have satisfaction. If not, the Holden Customer Assistance office is at your disposal.

☎ The Australian Holden Customer Assistance representatives can be telephoned from anywhere within Australia for only the cost of a local call. The Melbourne area number is **9646 5466**. Outside the Melbourne Metropolitan area, the number is **1800 033 349**.

If your concern relates to parts / accessories and you have made contact with the Retailer or Distributor without satisfaction, you may contact Holden Service Parts Operations on (03) 9797 7341.

Naturally, telephoning is the quickest and the best way to contact. However, if you prefer to write the address is:

The Manager
✉ Holden Customer Assistance Centre
GPO Box 1714
Melbourne, 3001.

Your letter should clearly outline your concern or query, and include the following:

✍
- Your name and address.
- Telephone numbers, both private & business.
- Servicing Retailer Premises name and address.
- Vehicle model.
- Vehicle identification number (I.S.O.V.I.N.), refer to the inside front cover of this Handbook.
- Date of purchase.
- Current odometer reading.

Most of this information will be found on the Vehicle Identification Certificate, located inside the front cover of this Handbook.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

FOR NEW ZEALAND HOLDEN OWNERS

The information in this Owner's Handbook applies primarily to Australian Holden vehicles and there may be some differences to the Warranty and Owner Assistance provisions for New Zealand. Applicable details for New Zealand are set out in the Holden Warranty and Owner Assistance Information booklet enclosed in the New Zealand glovebox wallet.

For your convenience, a list of New Zealand Retailers is provided at the end of this Chapter.

☎ New Zealand Assistance can be reached on:

0800 HOLDEN (0800 465336)

This number provides access to New Zealand Roadside Assistance as well as New Zealand Customer Assistance.

✉ If you prefer to write, the address is:

The Manager
Holden Customer Assistance Centre
GPO Box 1714
Melbourne
Australia 3001

AUSTRALIAN HOLDEN DEALERS

N.S.W. Metropolitan

ARNCLIFFE
Suttons Motors Arncliffe P/L
93 Princes Highway
P: (02) 9335 9000 FAX: (02) 9335 9006

ASHFIELD
Muirs Holden
252 Parramatta Road
P: (02) 9798 8888 Fax: (02) 9799 7010

BALGOWLAH
Peninsula Holden Balgowlah
164 Condamine Street
P: (02) 9949 1888 FAX (02) 9949 7237

BANKSTOWN
Peninsula Holden Bankstown
466 Chapel Road
P: (02) 9790 1234 Fax: (02) 9790 0033

BLACKTOWN
Heartland Holden
120~128 Sunnyholt Road
P: (02) 8811 0800 Fax: (02) 9672 8377

CAMDEN
Paul Wakeling Holden-Camden
33 Edward Street
P: (02) 4655 5000 Fax: (02) 4655 5001

CAMPBELLTOWN
Paul Wakeling Holden
Cnr Blaxland & Mill Roads
P: (02) 4628 1444 Fax: (02) 4628 3262

CASTLE HILL
Heartland Holden
Cnr Victoria Ave/Windsor Rd
P: (02) 9894 6666 Fax: (02) 9894 5600

CHULLORA
Suttons Motors (Chullora) P/L
Cnr Hume Hwy/Waterloo Rd
P: (02) 9642 0233 Fax: (02) 9642 7798

DEE WHY
Peninsula Holden Dee Why
Cnr May & Mooramba Roads
P: (02) 9982 1311 Fax: (02) 9982 3755

EAST SYDNEY
Suttons City Holden
137-157 Bourke Street
P: (02) 9357 4222 Fax: (02) 9358 5542

FAULCONBRIDGE, BLUE MOUNTAINS
Blue Mountains Holden
435~437 Great Western Hwy
P: (02) 4751 1911 Fax: (02) 4751 2481

GORDON
Sundell Holden
836 Pacific Highway
P: (02) 9418 0000 Fax: (02) 9498 2906

HOMEBUSH
Suttons Motors Homebush P/L
112 Parramatta Road
P: (02) 9746 4500 Fax: (02) 9746 7206

LAKEMBA
United Holden Lakemba
817 Canterbury Road
P: (02) 9740 5555 Fax: (02) 9740 5907

LANSVALE
Lansvale Holden
266~284 Hume Highway
P: (02) 9728 7333 Fax: (02) 9726 1085

LIVERPOOL
McGrath Holden
411~419 Hume Highway
P: (02) 9821 5000 Fax: (02) 9821 1993

PARRAMATTA
Heartland Holden
65 Church Street
P: (02) 9204 6666 Fax: (02) 9635 6346

PENNANT HILLS
Barry Smith Holden
343~355 Pennant Hills Road
P: (02) 9483 3333 Fax: (02) 9484 7475

PENRITH
Heartland Holden
Cnr Henry St & Evan Street
P: (02) 4732 1966 Fax: (02) 4721 5896

ROCKDALE
United Holden Rockdale
591 Princes Hwy
P: (02) 9567 0400 Fax: (02) 9597 0410

ROSEBERY
Suttons City Holden
Link Road
P: (02) 9931 3000 Fax: (02) 9931 3001

RYDE
Hunter Holden
603~619 Victoria Road
P: (02) 9808 9123 Fax: (02) 9809 6592

AUSTRALIAN HOLDEN DEALERS CONT.

ST LEONARDS
Hunter Holden
4 Herbert Street
P: (02) 9906 4044 Fax: (02) 9439 4635

ST. MARY'S
Heartland Holden
Cnr Glossop & Harris Streets
P: (02) 9673 2111 Fax: (02) 9673 4932

SUTHERLAND
McGrath Holden Sutherland
499~505 Princes Highway
P: (02) 9545 4811 Fax: (02) 9545 2533

WAITARA
Suttons Motors Waitara P/L
90 Pacific Hwy
P: (02) 9487 2222 Fax: (02) 9489 0009

WINDSOR
Hawkesbury Valley Holden
18 Macquarie Street
P: (02) 4577 4077 Fax: (02) 4577 2592

N.S.W. Country

ARMIDALE
Graham Betts Holden
103 Rusden Street
P: (02) 6772 9444 Fax: (02) 6772 5836

BALLINA
Quayside Motors
Cnr Ronan Place & Pacific Hwy
P: (02) 6686 5111 Fax: (02) 6686 8574

BATEMANS BAY
Surfair Holden
30-32 Orient Street
P: (02) 4472 5111

BATHURST
Bathurst Holden
Mitchell Highway
P: (02) 6331 2077 Fax: (02) 6331 9177

BEGA
Bega Valley Holden
Cnr Upper and Gibbs Sts
P: (02) 6492 2333 Fax: (02) 6492 3105

BLAYNEY
Blayney Holden
98 Adelaide Street
P: (02) 6368 2745 Fax: (02) 6368 3257

BOMBALA
Delcott Engineering Pty Ltd
Maybe Street
P: (02) 6458 3341 Fax: (02) 6458 3940

BOOROWA
Boowowa Auto Repairs
40 Marsden Street
P: (02) 6385 3305

BROKEN HILL
Donlee Motors Pty Ltd
Cnr Galena & Rakow Streets
P: (08) 8087 2463 Fax: (08) 8087 7971

CARDIFF
Kelly Holden
35~39 MacQuarie Road
P: (02) 4954 7733 Fax: (02) 4954 9407

CASINO
Casino Holden
142 Barker Street
P: (02) 6662 2822 Fax: (02) 6662 2101

CESSNOCK
Geoff Boyd Holden
240~246 Maitland Road
P: (02) 4990 0555 Fax: (02) 4990 0575

COBAR
Cobar Holden
Cnr Lewis St & Louth Road
P: (02) 6836 4005 Fax: (02) 6836 3409

COFF'S HARBOUR
Geoff King Holden
Cnr Pacific Hwy and Thompson Road
P: (02) 6652 2288 Fax: (02) 6652 5360

COOMA
High Country Holden
66~70 Sharp Street
P: (02) 6452 1077 Fax: (02) 6452 1142

COONABARABRAN
Coonabarabran Holden
24 Charles Street
P: (02) 6842 1499 Fax: (02) 6842 2473

COONAMBLE
Moody's Motors
37 Aberford Street
P: (02) 6822 1161 Fax: (02) 6822 1624

AUSTRALIAN HOLDEN DEALERS cont.

COOTAMUNDRA
Jenkins Garage
111 Wallendoon Street
P: (02) 6942 2522 Fax: (02) 6942 1493

COWRA
Waugoola Motors Pty Ltd
Kendal Street
P: (02) 6342 1800 Fax: (02) 6342 3614

CROOKWELL
Crookwell Autos
114 Goulburn Street
P: (02) 4832 1433 Fax: (02) 4832 2157

DENILIQUIN
Burchfield Bros & Co
112~114 End Street
P: (03) 5881 2133 Fax: (03) 5881 3322

DORRIGO
Phil Noble Motors
46~48 Hickory Street
P: (02) 6657 2017 Fax: (02) 6657 2217

DUBBO
Golden West Holden
54 Bourke Street
P: (02) 6882 1011 Fax: (02) 6882 7102

DUNGOG
Turner Holden
248 Dowling Street
P: (02) 4992 1816 Fax: (02) 4992 1833

EDEN
Ron Doyle
113 Princes Highway
P: (02) 6496 1420 Fax: (02) 6496 1467

FINLEY
Riverina Holden
104 Murray Street
P: (03) 5883 1211 Fax: (03) 5883 1638

FORBES
Frank Spice Holden
20~22 Dowling Street
P: (02) 6851 1755 Fax: (02) 6852 2825

GATESHEAD
Brian Kelly Holden
39 Pacific Highway
P: (02) 4920 7000 Fax: (02) 4920 8008

GILGANDRA
Gilgandra Holden
3 Morris Street
P: (02) 6847 1888 Fax: (02) 6847 1277

GLEN INNES
Glen Severn Holden
167 Grey Street
P: (02) 6732 2888 Fax: (02) 6732 3394

GOSFORD
Barry Robertson Holden
Pacific Highway
P: (02) 4325 0511 Fax: (02) 4324 1043

GOULBURN
Geissler Motors
279~298 Auburn Street
P: (02) 4821 3744 Fax: (02) 4821 9798

GRAFTON
Ken Casson Holden
37~39 Turf Street
P: (02) 6642 6666 Fax: (02) 6642 6737

GRENFELL
Peter Mellon Motors
40 Alexandra Street
P: (02) 6343 1522 Fax: (02) 6343 1347

GRIFFITH
Leo Franco Holden
164~166 Yambil Street
P: (02) 6964 2977 Fax: (02) 6962 4916

GUNNEDAH
Namoi Valley Motors
48 Barber Street
P: (02) 6742 0211 Fax: (02) 6742 3842

HARDEN
Ginty & O'Leary
Cnr Station & Albury Streets
P: (02) 6386 2320 Fax: (02) 6386 2722

HAY
Royce Curtis Motors
168 Lachlan Street
P: (02) 6993 1503 Fax: (02) 6993 2212

HOLBROOK
Lieschke Motors Pty Ltd
78 Albury Street
P: (02) 6036 2244 Fax: (02) 6036 2831

INVERELL
Gaukroger Sales Pty Ltd
Vivian Street
P: (02) 6722 2722 Fax: (02) 6722 1804

KANDOS
Chrisfield Holden
11 Angus Street
P: (02) 6379 4204 Fax: (02) 6379 4606

AUSTRALIAN HOLDEN DEALERS cont.

KEMPSEY
Thoroughgood Holden
118~132 Belgrave Street
P: (02) 6562 1381 Fax: (02) 6562 1383

KIAMA
Glen Fulton Holden
35~41 Collins Street
P: (02) 4232 1888 Fax: (02) 4232 3062

KYOGLE
O & H Holden
128~134 Summerland Way
P: (02) 6632 1711 Fax: (02) 6632 2552

LEETON
John Ryan Holden
47~51 Pine Avenue
P: (02) 6953 2466 Fax: (02) 6953 6725

LISMORE
John Chant Motors Pty Ltd
Carrington Street
P: (02) 6621 2601 Fax: (02) 6622 4659

LITHGOW
Lithgow City Holden
255 Main Street
P: (02) 6351 4555 Fax: (02) 6351 4653

MACKSVILLE
Eastland Holden
18~22 Cooper Street
P: (02) 6568 1711 Fax: (02) 6568 1816

MACLEAN
O'Halloran Motors
175 River Street
P: (02) 6645 2844 Fax: (02) 6645 4003

MAITLAND
Heritage Holden
Cnr New England Hwy & Bungaree St
P: (02) 4932 0779 Fax: (02) 4932 0473

MOREE
Keith Haddad Holden
Cnr Boston & Heber Streets
P: (02) 6752 1855 Fax: (02) 6752 1298

MORUYA
Surfair Holden
88 Vulcan Street
P: (02) 4474 2555 Fax: (02) 4474 2129

MOSS VALE
Moss Vale Holden
160~162 Argyle Street
P: (02) 4868 1055 Fax: (02) 4868 3330

MULLUMBIMBY
Tony Carsburg Holden
2 Argyle Street
P: (02) 6684 2066 Fax: (02) 6684 4593

MUDGEE
Ross Granata Motors
32 Sydney Road
P: (02) 6372 1766 Fax: (02) 6372 3735

MURWILLUMBAH
Tweed Motors
29 Prospero Street
P: (02) 6672 4444 Fax: (02) 6672 5811

MUSWELLBROOK
Upper Hunter Motors Pty Ltd
116 Bridge Street
P: (02) 6543 2577 Fax: (02) 6543 2565

NARRABRI
Allan Cooper Holden
181 Maitland Street
P: (02) 6792 3488 Fax: (02) 6792 4750

NEWCASTLE
Newcastle City Holden
King Street (Cnr Stewart Ave)
P: (02) 4961 5301 Fax: (02) 4961 6485

NOWRA
Glendon Motors Holden
301~313 Princes Highway
P: (02) 4421 0144 Fax: (02) 4423 0854

NYNGAN
New Bridge Service Centre
36 Numagee Street
P: (02) 6832 1761 Fax: (02) 6832 2760

ORANGE
Canobolas Holden
Cnr Summer St & Endsleigh Ave
P: (02) 6362 0155 Fax: (02) 6361 3702

PARKES
Broderick Motors Holden
Cnr Mitchell & Clarinda Sts
P: (02) 6862 2266 Fax: (02) 6862 1406

PORT MACQUARIE
Bob Todd Motors Pty Ltd
115 Gordon Street
P: (02) 6583 1100 Fax: (02) 6584 9508

AUSTRALIAN HOLDEN DEALERS cont.

QUIRINDI
Browning Motors
82 Henry Street
P: (02) 6746 1666 Fax: (02) 6746 1422

SCONE
Upper Hunter Motors (Scone)
100 Liverpool Street
P: (02) 6545 1355

SINGLETON
Lancaster Holden
80 John Street
P: (02) 6578 8700 Fax: (02) 6578 8733

TAMWORTH
Kensell's Holden
Cnr Bourke St & Kable Ave
P: (02) 6766 6699 Fax: (02) 6766 7339

TAREE
Cullen Holden
21~25 Victoria Street
P: (02) 6552 2222 Fax: (02) 6552 1269

TEMORA
Rod Lovering Holden
607-608 Stockinbingal Road
P: (02) 6977 2255 Fax: (02) 6977 2033

TENTERFIELD
Sexton & Green (Sales & Service) P/L
148 Rouse Street
P: (02) 6736 1855 Fax: (02) 6736 1946

TUGGERAH
Barry Robertson Holden
172 Pacific Highway
P: (02) 4351 2588 Fax: (02) 4352 1759

TUMUT
Harry Kell & Sons Pty. Ltd
Cnr. Merrivale & Russell Streets
P: (02) 6947 2293 Fax: (02) 6947 3763

TUNCURRY
Great Lakes Holden
144 Manning Street
P: (02) 6555 6644 Fax: (02) 6555 7433

ULLADULLA
Alan May Holden
169 Princes Highway
P: (02) 4455 1166 Fax: (02) 4455 4122

WAGGA WAGGA
Wagga Motors Pty Ltd
32 Dobney Avenue
P: (02) 6925 3411 Fax: (02) 6925 3283

WALCHA
Bowdens Holden Walcha
18 Derby Street
P: (02) 6777 2226 Fax: (02) 6777 2319

WALGETT
Walgett Garage Pty Ltd
81 Wee Waa Street
P: (02) 6828 1088 Fax: (02) 6828 1198

WALLA WALLA
D.E. Lieschke & Son Pty Ltd
63 Commercial Road
P: (02) 6029 2202 Fax: (02) 6029 2134

WARIALDA
Roger Moore
Hope Street
P: (02) 6729 1570 Fax: (02) 6729 1104

WARILLA
Wilson's Holden
29 Shellharbour Road
P: (02) 4295 1223 Fax: (02) 4296 1007

WARREN
Fuller Bros
Dubbo Street
P: (02) 6847 4978 Fax: (02) 6847 4477

WELLINGTON
Gersbach's Garage Pty Ltd
92 Lee Street
P: (02) 6845 2733 Fax: (02) 6845 3236

WEST WYALONG
West Wyalong Motors
183 Main Street
P: (02) 6972 2388 Fax: (02) 6972 2570

WOLLONGONG
Dwyers City Holden
31~33 Crown Street
P: (02) 4229 9222 Fax: (02) 4229 5105

YOUNG
Harden & Geelan Holden
30 Boorowa Street
P: (02) 6382 1155 Fax: (02) 6382 4673

AUSTRALIAN HOLDEN DEALERS cont.

A.C.T.

BELCONNEN
Gerald Slaven Holden
2 Josephson Street
P: (02) 6251 5111 Fax: (02) 6253 1298

BRADDON
Rolfe Holden
44 Mort Street
P: (02) 6248 7888 Fax: (02) 6257 1328

PHILLIP
Commonwealth Motors Pty Ltd
158 Melrose Drive
P: (02) 6282 3522 Fax: (02) 6282 5214

Tas.

BURNIE
Motors Burnie
Marine Terrace
P: (03) 6431 1122 Fax: (03) 6431 3146

DEVONPORT
Motors Devonport
Victoria Parade
P: (03) 6424 4033 Fax: (03) 6424 5249

HOBART
Motors Pty Ltd
179 MacQuarie Street
P: (03) 6230 7307 Fax: (03) 6230 7380

LAUNCESTON
Motors Launceston
93~95 Elizabeth Street
P: (03) 6332 9101 Fax: (03) 6334 5245

Vic. Metropolitan

BACCHUS MARCH
Alan Mance Holden Bacchus March
4 Graham Street
P: (03) 5367 4300 Fax: (03) 53674299

BERWICK
Barry Bourke Holden
755 Princes Highway
P: (03) 9707 2222 Fax: (03) 9707 3091

BUNDOORA
Watson Holden
413 Grimshaw Street
P: (03) 9467 4677 Fax: (03) 9467 7661

BURWOOD
Penfold Holden
142 Burwood Highway
P: (03) 9268 1333 Fax: (03) 9268 1335

CHELSEA
Harrison Holden
370 Nepean Highway
P: (03) 9772 2233 Fax: (03) 9772 2190

CHELTENHAM
Booran Holden
1212 Nepean Highway
P: (03) 9584 3333 Fax: (03) 9584 4285

DANDENONG
Booran Holden
17 Lonsdale Street
P: (03) 9794 5455 Fax: (03) 9792 4871

DONCASTER
Doncaster Holden
808 Doncaster Road
P: (03) 9848 1330 Fax: (03) 9848 1331

ELSTERNWICK
Summit Holden
67 Nepean Highway
P: (03) 9528 2222 Fax: (03) 9923 2633

ESSENDON
Preston Motors (Essendon) P/L
205~211 Keilor Road
P: (03) 9374 2888 Fax: (03) 9379 6754

FAWKNER
Mantello Holden
1263 Sydney Road
P: (03) 9359 1333 Fax: (03) 9359 9334

FERNTREE GULLY
Ferntree Gully Holden
980 Burwood Highway
P: (03) 9753 1222 Fax: (03) 9758 3435

FOOTSCRAY
Alan Mance Holden
435 Barkly Street
P: (03) 9396 8000 Fax: (03) 9396 8001

AUSTRALIAN HOLDEN DEALERS cont.

FRANKSTON
Bay City Holden
140 Dandenong Road
P: (03) 9784 4444 Fax: (03) 9784 4419

GEELONG
R & B Smith Holden
510 Moorabool Street
P: (03) 5222 2888 Fax: (03) 5221 3114

GEELONG
Winter & Taylor Holden
23 Cavendish Street
P: (03) 5222 1811 Fax: (03) 5221 1873

GLENHUNTLY
Booran Holden
1234 Glenhuntly Road
P: (03) 9571 9313 Fax: (03) 9571 8374

GLEN WAVERLEY
Geoff Brady Holden
565~577 Springvale Road
P: (03) 9550 5888 Fax: (03) 9550 5855

HASTINGS
John Collins Holden
2041 Frankston-Flinders Road
P: (03) 5979 4433 Fax: (03) 5975 4720

LILYDALE
Heritage Holden
344 Main Street
P: (03) 9735 5566 Fax: (03) 9735 1040

MELTON
Alan Mance Holden
1 Holland Drive
(03) 9746 9666 Fax: (03) 9746 9555

MORNINGTON
John Collins Holden
976 Nepean Highway
P: (03) 5975 4433 Fax: (03) 5975 4720

OAKLEIGH
Garry & Warren Smith
1575 Dandenong Road
P: (03) 9568 6333 Fax: (03) 9568 5691

PRESTON
Ralph D'Silva Holden
573~603 High Street
P: (03) 9471 0500 Fax: (03) 9478 4210

RINGWOOD
Patterson Cheney Holden
45~57 Maroondah Highway
P: (03) 9262 6666 Fax: (03) 9870 1113

SOUTH MELBOURNE
South City Holden
380 City Road
P: (03) 9627 3333 Fax: (03) 9682 6888

SOUTH YARRA
Penfold Holden
681 Chapel Street
P: (03) 9827 2272 Fax: (03) 9826 5328

SUNBURY
Sunbury Holden
93~95 Horne Street
P: (03) 9740 3000 Fax: (03) 9740 4777

SUNSHINE
Kevin Dennis Holden
272 Ballarat Road
P: (03) 9292 9292 Fax: (03) 9292 9200

WERRIBEE
Ballan Holden
56 Princes Highway
P: (03) 9741 2222 Fax: (03) 9742 3797

WEST MELBOURNE
Summit Holden
577 King Street
P: (03) 9329 6611 Fax: (03) 9329 1550

Vic. Country

ALEXANDRA
Alexandra Total Automotive Services
120 Grant Street
P: (03) 5772 1588 Fax: (03) 5772 1978

ARARAT
David Reid Motors
High Street
P: (03) 5352 4100 Fax: (03) 5352 4388

BAIRNSDALE
The Big Garage
628 Princes Highway
P: (03) 5152 4131 Fax: (03) 5152 5313

BALLARAT
Peter Amor Motors
211 Gillies Street
P: (03) 5339 9333 Fax: (03) 5339 9202

BENALLA
Arnott's Motors
88~90 Bridge Street
P: (03) 5762 2500 Fax: (03) 5762 1586

AUSTRALIAN HOLDEN DEALERS cont.

BENDIGO
Ron Poyser Holden
Cnr High & Myrtle Streets
P: (03) 5442 3999 Fax: (03) 5442 7766

CAMPERDOWN
Camperdown Auto Parts
96 Manifold Street
P: (03) 5593 1983 Fax: (03) 5593 1979

CASTERTON
Coxons Holden
139 Henty Street
P: (03) 5581 1166 Fax: (03) 5581 2116

CHARLTON
Walsh Motors, Charlton
70~74 High Street
P: (03) 5491 1444 Fax: (03) 5491 1984

COBRAM
Neville Mustica Motors
Murray Valley Hwy
P: (03) 5872 1666 Fax: (03) 5872 1920

COHUNA
Hare Motors Holden
105~107 King George Street
P: (03) 5456 4488 Fax: (03) 5456 4448

COLAC
Parker Bros. Motor Co
224 Murray Street
P: (03) 5231 5533 Fax: (03) 5231 3853

DAYLESFORD
K.R. Little
Vincent Street
P: (03) 5348 2248

DONALD
O.A. Shilton & Sons Pty Ltd
5 Woods Street
P: (03) 5497 1400 Fax: (03) 5497 1505

ECHUCA
Echuca Motors
1 Nothern Highway
P: (03) 5482 1522 Fax: (03) 5480 6215

EUROA
Parker Bros Auto Co. Euroa
37~41 Clifton Street
P:(03) 5795 2702 Fax: (03) 5795 1288

HAMILTON
Bloods of Hamilton
210 Gray Street
P: (03) 5572 1433 Fax: (03) 5571 1182

HOPETOUN
Hopetoun Motors
78 Lascelles Street
P: (03) 5083 3143 Fax: (03) 5083 3290

HORSHAM
Ivan Morrow Motors Pty Ltd
22 O'Callaghans Parade
P: (03) 5382 0185 Fax: (03) 5382 0459

KANIVA
Kaniva Motors
82 Commercial Street
P: (03) 5392 2300 Fax: (03) 5392 2589

KOO WEE RUP
G & J Light Mechanical Repairs P/L
Station Road
P: (03) 5997 1325

KORUMBURRA
Peter Dunlevie Holden
42 Commercial Street
P: (03) 5655 1288 Fax: (03) 5655 1839

KYABRAM
D'Alberto Holden
60 McEwen Road
P: (03) 5852 1366 Fax: (03) 5852 1337

KYNETON
Mollison Motors Pty Ltd
167 Mollison Street
P: (03) 5422 3377 Fax: (03) 5422 3501

LEONGATHA
Gleeson Holden
37~43 Bair Street
P: (03) 5662 2361 Fax: (03) 5655 1839

MANSFIELD
Martin's Garage
52~54 Chenery Street
P: (03) 5775 2610 Fax: (03) 5775 1179

MARYBOROUGH
Graham Jacka Holden
35 Nolan Street
P: (03) 5461 1011 Fax: (03) 5461 4789

MILDURA
Stuart & Harrison (Sales) Pty Ltd
24~40A Deakin Avenue
P: (03) 5023 0051 Fax: (03) 5021 3076

MORTLAKE
W. Christian (Mortlake) Pty. Ltd.
107 Dunlop Street
P: (03) 5599 2301 Fax: (03) 5599 2567

AUSTRALIAN HOLDEN DEALERS cont.

MURRAYVILLE
Peers Motors
McKenzie Street
P: (03) 5095 2081 Fax: (03) 5095 2054

NHILL
Ivan Morrow Motors Pty Ltd
71~73 Nelson Street
P: (03) 5391 1333 Fax: (03) 5391 1228

ORBOST
Merlin Motors
Stanley Street
P: (03) 5154 1909

PORTLAND
Reynolds of Portland
Henty Highway
P: (03) 5523 1688 Fax: (03) 5523 6299

QUAMBATOOK
Quambatook Auto Services
32 Gutherie Street
P: (03) 5457 1237 Fax: (03) 5457 1420

ROCHESTER
Bruce Hocking Motors Pty Ltd
85 Lowry Street
P: (03) 5484 1455 Fax: (03) 5484 1140

RUTHERGLEN
Jasper Bros Pty Ltd
62 Main Street
P: (02) 6032 8404 Fax: (02) 6032 8156

SALE
Sam Gould Holden
273 York Street
P: (03) 5144 3944 Fax: (03) 5144 6289

SEYMOUR
Neil Beer Holden
49 Emily Street
P: (03) 5792 2777 Fax: (03) 5792 4111

SHEPPARTON
Parker Bros. Auto Co.
Benalla Road
P: (03) 5822 2666 Fax: (03) 5831 2507

STAWELL
Howden Holden
72~74 Longfield Street
P: (03) 5358 1888 Fax: (03) 5358 3954

SWAN HILL
Swan Hill Holden
94~102 Campbell Street
P: (03) 5033 1800 Fax: (03) 5032 2468

TALLANGATTA
Crispin Motors
21 Towong Street
P: (02) 6071 2414 Fax: (02) 6071 2655

TERANG
W. Christian (Terang) Pty Ltd
6a Baynes Street
P: (03) 5592 1588 Fax: (03) 5592 1481

TIMBOON
Timboon Motors
56 Bailey Street
P: (03) 5598 3007 Fax: (03) 5598 3362

TRARALGON
Colin Watson Holden
Princes Highway
P: (03) 5174 8000 Fax: (03) 5175 0050

UNDERBOOL
A.J. Gloster & Sons
Cotter Street
P: (03) 5094 6291 Fax: (03) 5094 6297

WANGARATTA
Alan Capp (New Cars) Pty Ltd
29 Tone Road
P: (03) 5721 2133 Fax: (03) 5721 4626

WARRACKNABEAL
Amor Motors Aubrey Truck Sales
33 Woolcock Street
P: (03) 5394 1055 Fax: (03) 5398 1904

WARRAGUL
Barry Bourke Warragul
167 Queen Street
P: (03) 5622 0000 Fax: (03) 5622 0333

WARRNAMBOOL
Callaghan Motors Pty Ltd
133~137 Fairy Street
P: (03) 5562 3711 Fax: (03) 5562 7415

WODONGA
McRae White Motors
182 Melbourne Road
P: (02) 6056 2333 Fax: (02) 6024 7899

WONTHAGGI
Wonthaggi Holden
2 Murray Street
P: (03) 5672 1122 Fax: (03) 5672 4141

AUSTRALIAN HOLDEN DEALERS cont.

YARRAM
John Palmer Holden
150 Commercial Road
P: (03) 5182 5122 Fax: (03) 5182 6166

YARRAWONGA
Pigdons
155 Belmore Street
P: (03) 5743 1577 Fax: (03) 5744 1788

Qld. Metropolitan

ASPLEY
Zupps Aspley Pty Ltd
1454 Gympie Road
P: (07) 3246 8000 Fax: (07) 3246 8092

BROWNS PLAINS
Zupps Hillcrest
Cnr Anzac Ave & Corporate Place,
Hillcrest,
P: (07) 3802 4000 Fax: (07) 3802 4099

CAPALABA
Oldfield Holden
103 Redland Bay Road
P: (07) 3245 2200 Fax: (07) 3245 2221

INDOOROOPILLY
Westpoint Holden
440 Moggill Road
P: (07) 3878 0440 Fax: (07) 3878 1340

IPSWICH
Ross Llewellyn Holden
246 Brisbane Road
P: (07) 3282 2922 Fax: (07) 3282 6359

LAIDLEY
Buhse's Garage
5 Spicer Street
P: (07) 5465 1406 Fax: (07) 5465 1706

MOOROOKA
John Sivyer Holden
1060 Ipswich Road
P: (07) 3892 3344 Fax: (07) 3848 8866

MT. GRAVATT
Zupps Motors Pty Ltd
1310 Logan Road
P: (07) 3877 0000 Fax: (07) 3877 0063

NEWSTEAD
Eagers Holden
95 Breakfast Creek Road
P: (07) 3364 1199 Fax: (07) 3364 1060

PETRIE
Village Motors
1059 Gympie Road
P: (07) 3285 2244 Fax: (07) 3285 1975

REDCLIFFE
Village Holden
425 Elizabeth Avenue
P: (07) 3883 0900 Fax: (07) 3883 2711

SPRINGWOOD
Motorama Holden
3455 Pacific Highway
P: (07) 3804 4888 Fax: (07) 3208 7018

WINDSOR
Eagers Holden
143 Newmarket Road
P: (07) 3357 6711 Fax: (07) 3357 5403

WOOLLOONGABBA
Armstrong Holden
73 Ipswich Road
P: (07) 3891 5522 Fax: (07) 3891 5146

WYNNUM
Doug Barton Holden
200 Tingal Road
P: (07) 3396 7777 Fax: (07) 3393 3593

Qld. Country

ATHERTON
Redding Motors Pty Ltd
2 Cook Street
P: (07) 4091 1344 Fax: (07) 4091 2039

AYR
Honeycombes Sales & Service
213~217 Queen Street
P: (07) 4783 2344 Fax: (07) 4783 2079

BEAUDESERT
Zupps Beaudesert
57 Brisbane Street
P: (07) 5541 2000 Fax: (07) 5541 3368

BILOELA
Andersons Auto City
Dawson Highway
P: (07) 4992 2833 Fax: (07) 4992 3066

AUSTRALIAN HOLDEN DEALERS cont.

BOWEN
McDermott Holden
98 Herbert Street
P: (07) 4786 1430 Fax: (07) 4786 2903

BUNDABERG
Ross Gray Holden
Takalvan Street
P: (07) 4150 1333 Fax: (07) 4150 1318

CABOOLTURE
Beecham Holden
Bribie Island Road
P: (07) 5495 1477 Fax: (07) 5495 2839

CAIRNS
Ireland Holden
227~233 Mulgrave Road
P: (07) 4052 3666 Fax: (07) 4052 3606

CALOUNDRA
Caloundra City Holden
45 Caloundra Road
P: (07) 5491 5522 Fax: (07) 5491 8016

CHARTERS TOWERS
Peters Holden
57 Mosman Street
P: (07) 4787 1177 Fax: (07) 4787 4858

CHARLEVILLE
Alan Dobbin Holden
129 Alfred Street
P: (07) 4654 1737 Fax: (07) 4654 3254

CHINCHILLA
Ainsworth Motors & Machinery Pty Ltd
55 Chinchilla Street
P: (07) 4662 7286 Fax: (07) 4662 7197

CROWS NEST
Dennis Nissen Motors
14 William Street
P: (07) 4698 1300 Fax: (07) 4698 1495

DALBY
Johnson's Holden
36 Drayton Street
P: (07) 4662 2422 Fax: (07) 4662 4311

EMERALD
Emerald Holden
Hospital Road
P: (07) 4983 9888 Fax: (07) 4983 9889

GATTON
Gatton Auto Centre
67 Railway Street
P: (07) 5462 1633 Fax: (07) 5462 1980

GLADSTONE
Andersons Auto City
56 Yarroon Street
P: (07) 4972 1177 Fax: (07) 4972 9141

GOONDIWINDI
Goondiwindi Holden
45 Russell Street
P: (07) 4671 0266 Fax: (07) 4671 0288

GYMPIE
Madills Holden
35 Mellor Street
P: (07) 5480 5500 Fax: (07) 5482 2672

HERVEY BAY
Whitaker Holden
96 Torquay Road
P: (07) 4128 1722

INGHAM
Devietti Holden
99 Lannercost Street
P: (07) 4776 1599 Fax: (07) 4776 3547

INNISFAIL
I.C. Taylor Pty Ltd
117 Edith Street
P: (07) 4061 1577 Fax: (07) 4061 3963

JULIA CREEK
Julia Creek Motors Pty Ltd
Burke Street
P: (07) 4746 7155 Fax: (07) 4746 7197

KILCOY
Hobart's Garage
58 Mary Street
P: (07) 5497 1204 Fax: (07) 5497 1204

KINGAROY
John Dundas Pty Ltd
79 Kingaroy Street
P: (07) 4162 1722 Fax: (07) 4162 3756

LONGREACH
Longreach Motors
33 Swan Street
P: (07) 4658 1700 Fax: (07) 4658 1857

MACKAY
Pioneer Holden
Cnr Gordon & Wellington Streets
P: (07) 4969 4299 Fax: (07) 4969 4288

AUSTRALIAN HOLDEN DEALERS cont.

MAROOCHYDORE
Sunco Holden
Wises Road
P: (07) 5443 7644 Fax: (07) 5443 7645

MARYBOROUGH
Whitaker Holden
109~111 March Street
P: (07) 4122 2255 Fax: (07) 4122 6222

MOUNT ISA
Bruce Marles Motor City
Marian Street
P: (07) 4743 3044 Fax: (07) 4743 8466

MURGON
Clifton Motors
Macalister Street
P: (07) 4168 1066 Fax: (07) 4168 1947

NAMBOUR
Sunco
Bruce Highway
P: (07) 5451 2000 Fax: (07) 5451 2099

NANANGO
Nanango Motors Pty Ltd
102 Drayton Street
P: (07) 4163 1108 Fax: (07) 4163 1108

NOOSAVILLE
Madill's
Lot 1 Lionel Donovan Drive
P: (07) 5470 0700 Fax: (07) 5474 0073

PROSERPINE
Crossley Car Sales Whitsunday Pty Ltd
162~164 Main Street
P: (07) 4945 1822 Fax: (07) 4945 2022

ROBINA
Robina Holden
16 Brabham Circuit
P: (07) 5575 0500 Fax: (07) 5562 1072

ROCKHAMPTON
Lawrence's
327 Richardson Road
P: (07) 4930 5111 Fax: (07) 4930 5112

ROMA
Maranoa Multi Agencies
Bowen Street
P: (07) 4622 2900 Fax: (07) 4622 1832

SOUTHPORT
Lockhart Holden
Cnr Nerang Road & Olsen Avenue
P: (07) 5597 2900 Fax: (07) 5597 2542

SPRINGSURE
Springsure Motors
Eclipse Street
P: (07) 4984 1177 Fax: (07) 4984 1361

ST. GEORGE
Halpin Motors
39~41 Grey Street
P: (07) 4625 5466 Fax: (07) 4625 5855

STANTHORPE
Central Motors
42 Maryland Street
P: (07) 4681 2200 Fax: (07) 4681 1479

TOOWOOMBA
Toowoomba Holden
Cnr James & Hume Streets
P: (07) 4690 0900 Fax: (07) 4690 0909

TOWNSVILLE
Tony Ireland Holden
87~91 Charters Towers Road
P: (07) 4726 7777 Fax: (07) 4721 1486

TULLY
Island Coast Holden
Bruce Highway
P: (07) 4068 1288 Fax: (07) 4068 2145

WARWICK
Deighton Motors Pty Ltd
Grafton Street
P: (07) 4661 2266 Fax: (07) 4661 1275

N.T.

ALICE SPRINGS
Peter Kittle Holden
46 Stuart Highway
P: (08) 8952 5500 Fax: (08) 8953 0847

DARWIN
Kerry Holden
21~25 Stuart Highway
P: (08) 8980 8080 Fax: (08) 8980 8081

KATHERINE
Wyn Holden
Lot 2399 Victoria Highway
P: (08) (08) 8972 2422 Fax: (08) 8971 0571

TENNANT CREEK
Kittles Holden
Paterson Street
P: (08) 8962 2251 Fax: (08) 8962 2527

AUSTRALIAN HOLDEN DEALERS cont.

S.A. Metropolitan

ADELAIDE
City Holden
223 Grenfell Street
P: (08) 8223 7666 Fax: (08) 8359 2588

ELIZABETH
Peter Page Holden
17 Elizabeth Way
P: (08) 8255 1288 Fax: (08) 8255 9260

HILLCREST
City Holden
327~329 Main North East Road
P: (08) 8261 5855 Fax: (08) 8369 0066

MALVERN
Claridge Holden
361~367 Unley Road
P: (08) 8272 1600 Fax: (08) 8373 0057

PORT ADELAIDE
Smiths of Port Adelaide
271 Commercial Road
P: (08) 8341 2255 Fax: (08) 8341 2233

PROSPECT
Metro Holden
84~88 Main North Road
P:(08) 8343 5000 Fax: (08) 8344 9670

REYNELLA
Southgate Holden
49~59 Main South Road
P: (08) 8381 9555 Fax: (08) 8381 6274

ROSE PARK
City Holden
14 Kensington Road
P: (08) 8334 4666 Fax: (08) 8334 4610

SOMERTON PARK
Hamilton Holden
278~288 Brighton Road
P: (08) 8179 4300 Fax: (08) 8358 3957

THEBARTON
Metro Holden
1 Port Road
P: (08) 8354 9555 Fax: (08) 8443 6855

VALLEY VIEW
Plaza Holden
817~839 North East Road
P: (08) 8263 4922 Fax: (08) 8265 5200

S.A. Country

BALAKLAVA
Balaklava Motors
4 Wallace Street
P: (08) 8862 1030 Fax: (08) 8862 2000

BERRI
Rosenthal Bros Pty Ltd
Vaughan Terrace
P: (08) 8582 3644 Fax: (08) 8582 3515

BORDERTOWN
Farmers Centre
South Terrace
P: (08) 8752 0266 Fax: (08) 8752 0233

CEDUNA
Beck Motors Pty Ltd
Poynton Street
P: (08) 8625 2616 Fax: (08) 8625 3201

CLARE
Mid North Motor Company
7 Old North Road
P: (08) 8842 2200 Fax: (08) 8842 2886

CLEVE
Pringles Ag. Plus
Rudall Road
P: (08) 8628 2150 Fax: (08) 8628 2537

CRYSTAL BROOK
Crouch Rural Pty. Ltd
26 Brandis Street
P: (08) 8636 2257 Fax: (08) 8636 2088

GAWLER
Steinborner Holden
Cnr Murray & Bridge Sts
P: (08) 8522 4222 Fax: (08) 8522 4898

KADINA
J.H. Rosewarne Pty Ltd
Graves Street
P: (08) 8821 1111 Fax: (08) 8821 1686

KEITH
Farmers Centre
McBain Street
P: (08) 8755 3222 Fax: (08) 8755 3211

KINGSTON
Lecornu's Service Garage
Agnes Street
P: (08) 8767 2424 Fax: (08) 8767 2533

AUSTRALIAN HOLDEN DEALERS cont.

LOXTON
Flight Motors Pty Ltd
Bookpurnong Terrace
P: (08) 8584 7277 Fax: (08) 8584 5937

MINLATON
Southway
9 Fifth Street
P: (08) 8853 2322 Fax: (08) 8853 2451

MENINGIE
Peter Hood Holden
Cnr Princes Highway & Coonalpyn Road
P: (08) 8575 1109 Fax: (08) 8575 1537

MT. BARKER
Gilbert Motors
57 Adelaide Road
P: (08) 8391 1500 Fax: (08) 8398 2124

MT. GAMBIER
O.G. Roberts & Co
Jubilee Highway West
P: (08) 8724 1111 Fax: (08) 8724 1100

MURRAY BRIDGE
Dutton Motors Pty Ltd
7 Adelaide Road
P: (08) 8532 1999 Fax: (08) 8531 0599

NARACOORTE
Kingcraig Motors Pty Ltd
158~164 Smith Street
P: (08) 8762 1555 Fax: (08) 8762 1806

PORT AUGUSTA
Augusta Motor Company Pty Ltd
38 Stirling Road
P: (08) 8641 0488 Fax: (08) 8642 4300

PORT LINCOLN
City Motors
King Street
P: (08) 8682 1100 Fax: (08) 8682 4734

PORT PIRIE
Spencer Holden
50 Ellen Street
P: (08) 8632 3888 Fax: (08) 8632 6405

RENMARK
Rosenthal Motors Pty Ltd
Ral Ral Avenue
P: (08) 8586 6626 Fax: (08) 8586 4040

STRATHALBYN
Gilbert Holden - Strathalbyn
High Street
P: (08) 8536 2066 Fax: (08) 8536 2672

TANUNDA
Hage & Co Pty Ltd
50 Murray Street
P: (08) 8563 2123 Fax: (08) 8563 3488

VICTOR HARBOR
Southern Motors Holden
5 Victoria Street
P: (08) 8552 1255 Fax: (08) 8552 2788

WAIKERIE
Riverside Holden
6 Crush Terrace
P: (08) 8541 2900 Fax: (08) 8541 3325

WHYALLA
McLeods Whyalla Motor Company
64 Essington Lewis Avenue
P: (08) 8645 7388 Fax: (08) 8645 5512

YANKALILLA
Martin Motors Pty Ltd
Main Street
P: (08) 8558 2052 Fax: (08) 8558 2911

W.A. Metropolitan

CANNINGTON
Brian Gardner Holden
1308~1324 Albany Hwy
P: (08) 9356 9000 Fax: (08) 9458 9144

FREMANTLE
Shacks Holden
64 Queen Victoria Street
P: (08) 9432 9432 Fax: (08) 9432 9456

GOSNELLS
Gibbons Holden
2325 Albany Highway
P: (08) 9398 2211 Fax: (08) 9398 5683

MELVILLE
Melville Holden
532~540 Canning Highway
P: (08) 9333 5333 Fax: (08) 9333 5300

AUSTRALIAN HOLDEN DEALERS cont.

MIDLAND
Goldy Holden
161 Great Eastern Highway
P: (08) 9274 8000 Fax: (08) 9274 6042

MORLEY
Metro Motors Holden
212 Walter Road West
P: (08) 9449 3522 Fax: (08) 9449 3596

OSBORNE PARK
North City Holden
Cnr Scarborough Beach Rd & Harborne St
P: (08) 9273 2222 Fax: (08) 9273 2220

PERTH
City Motors
505 Newcastle Street
P: (08) 9422 7777 Fax: (08) 9422 7630

ROCKINGHAM
Rockingham Holden
20 Smeaton Way
P: (08) 9550 9550 Fax: (08) 9550 9599

VICTORIA PARK
Youngs Holden
529 Albany Highway
P: (08) 9449 9449 Fax: (08) 9449 9494

WANNEROO
Phoenix Holden
5 Berriman Drive
P: (08) 9409 9200 Fax: (08) 9309 2140

W.A. Country

ALBANY
Albany City Holden
92~98 Earl Street
P: (08) 9842 8000 Fax: (08) 9841 8623

BRIDGETOWN
Kordics Bridgetown
183 Hampton Street
P: (08) 9761 1377 Fax: (08) 9761 2151

BROOKTON
Coote Motors
1 Robinson Road
P: (08) 9642 1108 Fax: (08) 9642 1003

BROOME
Norwest Holden
7 McPherson Street
P: (08) 9192 1277 Fax: (08) 9193 5249

BUNBURY
Bunbury Holden
3 Sandridge Road
P: (08) 9791 3899 Fax: (08) 9791 2990

BUSSELTON
Fennessy's
4~8 Bussel Hwy
P: (08) 9752 1577 Fax: (08) 9752 4080

CARNAMAH
T & H Walton Stores Pty Ltd
Robertson Street
P: (08) 9951 1130 Fax: (08) 9951 1082

CARNARVON
North West Autos
229 Robinson Street
P: (08) 9941 1159 Fax: (08) 9941 1363

COLLIE
Station Motors
84 Throssell Street
P: (08) 9734 1855 Fax: (08) 9734 1913

ESPERANCE
Dempster Holden
Norseman Road
P: (08) 9071 1155 Fax: (08) 9071 3799

GERALDTON
Young Motors
34 Cathedral Avenue
P: (08) 9921 1088 Fax: (08) 9964 1157

GNOWANGERUP
Umtali Nominees Pty Ltd
10 Youngenup Road
P: (08) 9827 1207 Fax: (08) 9827 1444

HARVEY
Stockman Holden
111 Uduc Road
P: (08) 9729 3333 Fax: (08) 9729 1140

KALGOORLIE
Golden City Holden
114 Boulder Road
P: (08) 9021 1699 Fax: (08) 9021 5737

AUSTRALIAN HOLDEN DEALERS cont.

KARRATHA
Moxham Motors
Lot 4551 Balmoral Road
P: (08) 9144 1225 Fax: (08) 9144 1258

KATANNING
Edwards Holden
159 Clive Street
P: (08) 9821 2388 Fax: (08) 9821 2429

KELLERBERRIN
Dowding Motors
1 Mitchell Street
P: (08) 9045 4141 Fax: (08) 9045 4466

KUNUNURRA
Argyle Holden
Lot 231 Bloodwood Drive
P: (08) 9168 2236 Fax: (08) 9169 1124

MANDURAH
Mandurah Holden
53 Pinjarra Rd
P: (08) 9535 8777 Fax: (08) 9535 8822

MANJIMUP
Manjimup Automotive Services
Pritchard Street
P: (08) 9771 1388 Fax: (08) 9777 1214

MOORA
Frank Lewis Holden
92 Gardiner Street
P: (08) 9651 1408 Fax: (08) 9651 1724

NAREMBEEN
Aquip Machinery
20 Churchill Avenue
P: (08) 9064 7214 Fax: (08) 9064 7065

NORTHAM
Withnell Motors
58 Fitzgerald Street
P: (08) 9622 5073 Fax: (08) 9622 3664

PORT HEDLAND
Moxham Motors
15 Anderson Street
P:(08) 9173 3660 Fax: (08) 9144 1258

NEW ZEALAND HOLDEN DEALERS

Auckland Metropolitan

HENDERSON
West City Holden
435 Great North Road
P: (09) 836 0097 Fax: (09) 837 5291

MANUKAU
Davie Motors Limited
58 Cavendish Drive
P: (09) 262 1012 Fax: (09) 262 1011

NEWMARKET
Schofield & Co. Limited
50 Great South Road
P: (09) 520 6369 Fax: (09) 524 1500

PANMURE
Moyes Motor Group Limited
510 Ellerslie/Panmure Highway
P: (09) 527 1200 Fax: (09) 527 8314

TAKAPUNA
Giltrap Holden
Wairau Road
P: (09) 444 8114 Fax: (09) 444 8008

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ALEXANDRA
Currie Motors
65 Centennial Avenue
P: (03) 448 6989 Fax: (03) 448 9384

AMBERLEY
Arthur Burke Limited
Markham Street
P: (03) 314 8121 Fax: (03) 314 8281

ASHBURTON
Smallbone Brothers Limited
Cnr. Burnett & Cass Streets
P: (03) 308 7159 Fax: (03) 308 5551

BLENHEIM
Wadsco Motors Limited
55-59 Scott Street
P: (03) 578 5199 Fax: (03) 578 2572

CHRISTCHURCH
Blackwell Motors Limited
Cnr. Cashell/Madras Streets
P: (03) 379 5500 Fax: (03) 366 4683

DUNEDIN
Cooke Howlison Limited
484 Andersons Bay Road
P: (03) 456 0570 Fax: (03) 455 5668

DARGAVILLE
Marcel Motors Limited
34 Victoria Street
P: (09) 439 7399 Fax: (09) 439 7399

GISBORNE
Enterprise Cars (1992) Limited
323 Gladstone Street
P: (06) 867 8368 Fax: (06) 867 1280

HAMILTON
Ebbett Waikato Limited
Anglesea Street
P: (07) 838 0949 Fax: (07) 838 3380

HASTINGS
Karamu Holden
Cnr. Karamu Road & Albert Street
P: (06) 876 6700 Fax: (06) 876 6664

HAWERA
Moller Johnson Motors (Hawera) Limited
39-49 Regent Street
P: (06) 278 7166 Fax: (06) 278 5054

INVERCARGILL
GWD-Russells Limited
22 Yarrow Street
P: (03) 218 2149 Fax: (03) 218 3309

KAIKOHE
Bay Motors Limited
Wihongi Street
P: (09) 401 1860 Fax: (09) 401 0883

KAITAIA
Jim Crene Motors Limited
Melba Street
P: (09) 408 1310 Fax: (09) 408 1311

LEVIN
Horowhenua Motor Co. Limited
1-11 Exeter Street
P: (06) 368 7169 Fax: (06) 368 8536

LOWER HUTT
Brendan Foot Motors Limited
16-18 Railway Avenue
P: (04) 587 0005 Fax: (04) 566 2311

MASTERTON
Wagg & Harcombe Limited
87-93 Dixon Street
P: (06) 377 5169 Fax: (06) 378 8840

MATAMATA
Matamata Motor Group Limited
2 Arawa Street
P: (07) 888 7059 Fax: (07) 888 5709

MORRINSVILLE
Nicholson United Autos
Thames Street
P: (07) 889 7042 Fax: (07) 889 3529

NEW ZEALAND HOLDEN DEALERS cont.

NAPIER
Karamu Holden
Cnr Wellesley Rd & Thakeray St
P: (06) 874 3033 Fax: (06) 834 1454

NELSON
Nelson Bays Holden
2 Selwyn Place
P: (03) 545 7222 Fax: (03) 545 6057

NEW PLYMOUTH
Auto City
86 Molesworth Street
P: (06) 758 0919 Fax: (06) 758 5330

OAMARU
North Otago Motor Group Limited
24-30 Severn Street
P: (03) 434 5099 Fax: (03) 434 9983

OTOROHANGA
Pat Prescott Limited
205 Maniapoto Street
P: (07) 873 7119 Fax: (07) 873 7156

PAEROA
Linn Motors Limited
10-12 Belmont Road
P: (07) 862 8715 Fax: (07) 862 8711

PAHIATUA
Jones Motors Limited
34 Main Street
P: (06) 376 7524 Fax: (06) 376 7192

PALMERSTON NORTH
Robertson Motors
200 Rangitikei Street
P: (06) 358 1062 Fax: (06) 359 0303

PARAPARAUMU
Guy Weaver's Auto Village
Main Road
P: (04) 298 8089 Fax: (04) 298 7186

PUKEKOHE
Counties Motorcourt Limited
Cnr. Edinburgh & Tobin Streets
P: (09) 238 3259 Fax: (09) 238 3298

ROTORUA
Shorland Slater Limited
Old Taupo Road
P: (07) 348 3179 Fax: (07) 347 1503

STRATFORD
Ansford Johnson Limited
369 Broadway
P: (06) 765 6119 Fax: (06) 765 7410

TAUPO
Taupo Holden
Ruapehu Street
P: (07) 378 4130 Fax: (07) 378 0357

TAUMARANUI
Turaki Motors Limited
Hakiaha Street
P: (07) 895 7009 Fax: (07) 895 8909

TAURANGA
Ebbett Tauranga
Cnr. Wharf Street & Cameron Road
P: (07) 578 2843 Fax: (07) 578 6044

TE AROHA
Summit Motor Co. Limited
Kenrick Street
P: (07) 884 8174 Fax: (07) 884 8133

TE AWAMUTU
Rosetown Motors Limited
Cnr. Churchill & Mahoe Streets
P: (07) 871 5143 Fax: (07) 871 5045

TE PUKE
Bob Batchelor Motors Limited
Jellicoe Street
P: (07) 573 9781 Fax: (07) 573 6057

THAMES
Linn Motors
429 Pollen Street
P: (07) 868 9591 Fax: (07) 868 9595

TIMARU
Hervey Motors Limited
6 Sefton Street
P: (03) 684 7179 Fax: (03) 684 7176

UPPER HUTT
Twin Lakes Motor Company
Fergusson Drive
P: (04) 528 5609 Fax: (04) 527 8390

WANGANUI
Bob Burgess Motors Limited
1 Purnell Street
P: (06) 345 5588 Fax: (06) 345 5584

WELLINGTON
Williams & Adams
72-82 Taranaki Street
P: (04) 801 6777 Fax: (04) 385 7437

WHAKATANE
Harts Limited
Commerce Street
P: (07) 308 6334 Fax: (07) 307 1536

WHANGAREI
Mark Cromie Holden
5-13 Hannah Street
P: (09) 438 3199 Fax: (09) 438 2646

CHAPTER 10

Tow and Load

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10-2 Loading the vehicle
10-3 Loading the vehicle and towing
10-4 Towing

LOADING THE VEHICLE

Overloading is a safety hazard and could also shorten the life of your vehicle or its parts. The recommended carrying capacity of your vehicle (including all occupants and luggage) is 380 kg for convertible models and 445 kg for other models.

If you load your vehicle other than to the above recommendations then you should ensure that the MAXIMUM REAR AXLE LOAD and the GROSS VEHICLE WEIGHT are not exceeded.

Curb weight

The curb weights shown below are for the weight of an unloaded vehicle, with a full tank of fuel.

1,113 kg = curb weight for SXi model
1,204 kg = curb weight for SRi model
1,282 kg = curb weight for SRi Turbo model
1,153 kg = curb weight for City 4 and 5 door models
1,175 kg = curb weight for CD 4 and 5 door models
1,183 kg = curb weight for CDX 4 and 5 door models
1,363 kg = curb weight for Convertible model
1,429 kg = curb weight for Convertible Turbo model

Add 20 kg if the vehicle is fitted with an automatic transmission; add 20 kg if the vehicle is fitted with air conditioning.

(GVM) Gross Vehicle Mass (weight)

The Gross Vehicle Mass is the maximum that a vehicle is allowed to weigh when fully loaded. This must include any luggage, passengers, roof rack load and a full tank of fuel. If you are towing, then the weight of the tow bar ball load (see following page) must also be included. The maximum, allowable weight for your vehicle is:

1,720 kg = GVM for 3 door models (add 20 kg if SRi fitted with automatic transmission)
1,770 kg = GVM for SRi Turbo model
1,720 kg = GVM for 4 and 5 door models
1,805 kg = GVM for Convertible (add 15 kg for Turbo model)

Maximum rear axle load

The maximum allowable rear axle load for your vehicle is:

794 kg = models except SRi and Convertible
803 kg = SRi models only (add 17 kg for Turbo SRi model)
845 kg = Convertible models only

Note: For all non-convertible models: remember to take the tow bar ball load into account when determining the rear axle load.

LOADING THE VEHICLE AND TOWING

Roof rack loads

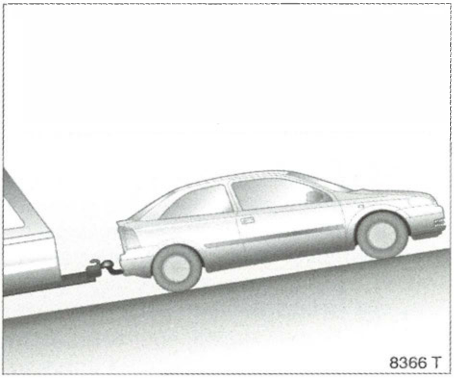
WARNING:

For safety reasons and to avoid damaging the roof, only the roof rack approved by Holden for your vehicle, should be used. The maximum allowable roof load is 100 kg (including the weight of the roof racks).

Roof rack loads alter the handling of a vehicle, due to a change in the centre of gravity. When carrying loads on the roof rack avoid abrupt swerving or sharp steering. The load should be evenly distributed and you should not drive faster than 120 km/h. The weight on the roof rack must be included when working out the maximum vehicle load (GVM) – the roof rack load should be treated as luggage.

Towing

Your vehicle is designed primarily as a passenger vehicle, so handling, durability and economy may be affected by towing a caravan or trailer. Before attempting any towing, ensure that the correct equipment is fitted.



The towing capacity when trailer brakes are fitted: 1,000 kg (except Convertible).

The towing capacity when trailer brakes are not fitted: 595 kg (except Convertible).

Trailer brakes are recommended on trailers weighing over 500 kg (except for the convertible Astra).

WARNING

Convertible models are not designed or intended to be used for towing a trailer, caravan etc.

In higher elevations and / or mountainous terrain the maximum towing and loading limits should be reduced.

Note: Holden towing equipment is recommended where it is available. Where it is not available, no recommendation is made as to the make of equipment which should be used. Holden will not accept liability for defects occurring in towing equipment not marketed by Holden or for defects in the vehicle arising from the use of such equipment or for loss or injury caused by use of such equipment. The use of such equipment may void your New Vehicle Warranty, to the extent that Holden considers the non-recommended equipment affects the specifications or quality of your Holden vehicle.

Tow ball load

The tow ball load is the weight on the tow ball, when the packed trailer / caravan is hitched. It must not exceed or drop below the following.

- loaded trailer weighing up to 625 kg – at least 4% of the loaded trailer weight but not more than 75 kg
- loaded trailer weighing over 625 kg – at least 25 kg but not more than 75 kg.

TOWING

The tow ball load can be adjusted by correctly packing the contents of the trailer / caravan.

If the tow ball load is too light (i.e. less than 4% of the loaded trailer weight) or too heavy (i.e. greater than 75 kg), the steering and handling of the vehicle will be greatly impaired. However, it is desirable to aim for the maximum, rather than the minimum tow ball load.

When measuring the tow bar ball load, make sure that the drawbar of the loaded trailer / caravan is at the same height as it will be when the trailer / caravan is mounted on the vehicle. This is particularly important for trailer / caravans with tandem axles.

Safe towing tips

Your vehicle will handle differently when towing. It is a good idea to make a couple of short distance trips with the trailer / caravan before you set off on the big one.

Have your vehicle correctly maintained and serviced.

Have your trailer / caravan maintained and serviced, with particular attention given to condition of brakes, tyres, suspension, wheel bearings, towing coupling and lighting.

You should have an extended-arm mirror on both sides of your vehicle.

Headlights may need re-aiming after the loaded caravan has been hitched, particularly if a load equalising hitch is not used.

Use a lower gear, rather than your brakes, when descending steep hills.

If your trailer / caravan moves off the road behind you, allow the left wheels of your vehicle to move off as well. When it is safe to do so, carefully steer back on to the road. A sudden attempt to steer back could make you swerve dangerously.

Towing precautions

- When heavily loading your vehicle or when towing, your tyres should be inflated to the maximum recommended pressure (refer to Chapter 7 for tyre placard location and information about tyre pressures). Also refer to Chapter 4, under 'Loading the vehicle' for driving information with increased loads.
- Loads should be secured so that they cannot slip and should be placed in the centre of the trailer / caravan if possible, i.e. above the axle.
- Trailer brakes are recommended on trailers weighing over 500 kg when loaded.
- The brakes on the trailer / caravan must be designed to cope with the braking requirements of that trailer / caravan under all towing conditions, without adversely affecting the brakes on the vehicle.
- Make sure that you have enough room when cornering and avoid sudden manoeuvres.
- In the case of trailer / caravans with low directional stability, it is advisable to use a stabiliser to damp rolling motions.
- The cooling fan is driven electrically and so is not dependant on engine speed. At high engine speeds a lot of heat is produced and at low engine speeds correspondingly less heat is produced. For this reason, when driving uphill, do not shift down into a lower gear (which will increase engine speed) whenever the vehicle can still climb the hill in the higher gear.
- Whenever a towbar is removed, be certain to have any mounting holes in the underbody properly sealed to prevent the possible entry of exhaust fumes, dust and water.
- Ensure that the tow bar does not obscure the rear licence plate. If necessary, remove the towbar tongue when it is not required for towing.

CHAPTER 11

Cleaning

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11-2 Interior cleaning
11-4 Caring for paint
11-6 Roof, paint polishing, wheels and tyres
11-7 Exterior glass cleaning
11-8 Cleaning products

INTERIOR CLEANING

WARNING:

Many cleaners may be toxic, flammable or may damage the interior. When cleaning the interior, avoid volatile cleaners such as: acetone, lacquer thinners, enamel reducers, nail polish removers, or cleaners such as laundry soaps, bleaches or reducing agents. Never use carbon tetrachloride, gasoline or naphtha for any cleaning purpose. Be sure the vehicle is well ventilated while using any cleaners and always follow the cleaning manufacturer's recommendations.

Care and cleaning of upholstery

Dust and dirt which accumulate on upholstery should be removed every few weeks – more often with constant driving. This can be done readily with a vacuum cleaner. Before attempting to remove spots and stains, it is necessary to determine as accurately as possible:

- The type of fabric.
- The nature and age of the stain.
- The effect of the stain removal agent upon the colour, structure and general appearance of the upholstery.

It is essential that stains be removed as soon as possible after they have been made. If they are allowed to remain on the fabric for any length of time they very often become oxidised or set, and removal becomes difficult, if not impossible.

Cleaning PVC coated fabrics

Vinyl (PVC) coated fabrics are used for seating, head linings and auxiliary trimming. The grades used vary according to their function. PVC fabrics are generally made by coating fabric with synthetic resins. Care of PVC fabrics is a relatively simple but important matter. The surface should be wiped over with a dry cloth during the regular cleaning of the vehicle.

Should dirt accumulate and become embedded in the material pattern, the following procedure is recommended.

1. Using lukewarm water and soap, or Holden Velour Fabric and Vinyl Cleaner, work up thick suds on a piece of cheesecloth, and apply to the surface. A soft bristle brush can be used to remove stubborn stains or dirt embedded in the grain of the material.
2. Repeat using only a damp cloth and no soap.
3. Wipe dry with a soft cloth. The above cleaning instructions also apply to the rubber floor mats.

Cleaning Leather trim

To remove surface dust and grit, regularly wipe leather with 'Softly' or similar or mild detergent in warm water using a soft cloth or sponge. Clean leather every 3 months with Holden Leather Cleaner or a mild saddle soap and a damp soft cloth to remove in-ground dirt which is not visible. Allow leather to dry naturally and apply Holden Leather Protector or a colourless bee's wax dressing. To revitalise the leather upholstery use Holden Leather Revitaliser.

INTERIOR CLEANING cont.

Cleaning cloth trim

Where the seats in your vehicle are upholstered with cloth, the following instructions should be observed.

- Most loose dirt and dust can be removed by a vacuum cleaner or soft brush.
- Do not use a whisk broom or a coarse hair brush.
- If normal soiling should take place it is recommended that the fabric be sponged lightly with warm water containing a detergent and a small amount of ammonia. The fabric should then be rubbed lightly, and if necessary, sponged again to remove anything stubborn. Soak up excess fluid with a dry cloth. Holden Velour Fabric and Vinyl Cleaner may be used sparingly.

Vehicles with air bags

Use only a dry cloth or mild cleaner to clean the steering wheel and instrument panel. Do not use any aggressive cleaning agents.

Cleaning carpet

Thoroughly brush or vacuum the carpet. In many instances the carpet may require no further cleaning. If the carpet is extremely soiled, thoroughly vacuum it to remove loose dirt then, using Holden Velour Fabric and Vinyl Cleaner, clean approximately one square foot at a time. After each area is cleaned, remove as much of the cleaner as possible with a vacuum cleaner.

Cleaning seat belts

Cleaning of seat belts can be carried out by using a mild non-abrasive soap and lukewarm water. After washing be sure to thoroughly sponge the washing solution out of the belts.

WARNING:

Do not bleach or dye seat belts since this may severely weaken them.

Cleaning interior glass

The interior glass area of the vehicle should be cleaned using Holden Glass Cleaner with a clean soft cloth. Care must be taken when cleaning inside the rear window so as not to damage the demister.

Never use abrasive cleaners on any vehicle glass, as they may cause scratches.

CARING FOR PAINT

To help preserve that shiny new vehicle finish, special attention should be given to correctly treating those conditions that can damage the paint.

Road bloom: If, over a long period of time, oils, dirt, exhaust and other pollutants are allowed to build up, they may combine to affect the paint finish.

Etching: Tree sap, bird droppings, salt water and other natural deposits can, if allowed to stay on the paint, leave an etching or scarring.

Pitting: Tar spots and some industrial fallout can react chemically and may cause pitting to the surface of the paint.

Paint inspection

Regular inspection of the vehicle should be made for scratch marks, cracks or damaged areas, all of which could develop rust. Any deep scratches, cracks or break-down in the finish should be repaired without delay. Care should be taken to ensure that any rusting is counteracted immediately, otherwise rust 'creep' will extend beyond the damaged area, particularly in tropical or coastal areas, where the moist, or salt-laden air accelerates rusting. The paint finish of the vehicle gives a very high degree of protection against the weather, but it should be realised that wear and deterioration occur when the vehicle is exposed to elements for prolonged periods. The vehicle therefore should be garaged whenever possible.

To prevent damage of the paint surface, foreign matter should always be removed as soon as possible. **Due to the acidity, it is recommended that foreign matter such as bird droppings be removed within 24 hours.**

The way the paint keeps its condition over time can be assisted by you. The easiest way to keep that paint looking bright and shiny is to keep it clean. A wash once a week will do wonders. However, it must be done correctly.

Washing your vehicle

1. Never use an automatic wash that has anything that touches the paint other than water.
2. Wash your vehicle once a week to remove any build up of road grime that may have been deposited on your paint.
3. Find a cool, shady spot to wash it. Do not ever wash it in direct sunlight.
4. Hose the vehicle down from top to bottom with lots of cold water. This removes any grit or other loose particles and substances. Do not use a sponge or cloth yet.
5. Fill a bucket with luke warm water and add no more than 2 capfuls of gentle detergent. Do not use hot water, strong soap or chemical detergents.
6. To remove bird droppings on paint, soak with a wet sponge for several minutes before washing off. If still evident, use a solution of 1 litre of water and 110 grams of dissolved baking soda (Bicarbonate of Soda). Flush the washed parts with clean water.
7. Starting with the roof, use a clean sponge to clean a small section at a time. Do not allow liquid to dry before rinsing off that section with clean water. When you have completed each section, rinse the whole vehicle again with cold water.
8. Dry the clean vehicle thoroughly with a good quality Chamois.

CARING FOR PAINT cont.

WARNING:

Care should be taken when moving the vehicle after washing, in case water has affected the brakes. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, lightly apply the brakes while maintaining a slow forward speed with a clear area ahead, until brake performance returns to normal.

Removing stains, such as grease, oil and tar spots

Just washing your vehicle regularly means that most of the harmful substances deposited on the paint will be removed before they can cause permanent damage. However, some substances are not easy to remove. So if you notice stains on the paint, make sure that you remove them at the earliest possible opportunity.

Grease and oil, and even tar if it is fresh, can be removed from the paint with a little kerosene or turpentine. As a precaution against staining, wash and polish the area as soon as possible after the stain has been removed.

A rubbing or cutting compound can be used after a normal wash. But this should never be done on a regular basis because it removes paint.

WARNING:

- **Some chemical cleaners used for removing road oils and tars from painted surfaces have been found to be detrimental to automotive paint.**
- **If petrol is spilt on the paint when refilling, flush off immediately with clean water, as petrol has a tendency to stain or soften the new paint finish during the weathering out period, particularly when the vehicle is exposed to high temperatures.**
- **Petrol MUST NOT be used to clean any painted or plastic surfaces.**

Ventilation system intake

The intake area between the bonnet and the windscreen may collect leaves, which will impair air flow into the vehicle.

It is recommended that this area be cleared of debris whenever you wash your vehicle.

Under vehicle washing

Your vehicle has a factory-applied PVC undercoating in the wheel arches (including longitudinal members) which provides permanent protection and needs no special maintenance. The surfaces of the vehicle underside not covered by PVC are provided with a durable protective wax coating. Once a year, preferably before the start of the cold season the wax coating and PVC coating should be checked and if necessary, restored to perfect condition. Commercial bitumen and rubber materials can damage PVC coating. Have all work on the underbody performed by a Holden Retailer, as it requires knowledge of the specified materials and experience concerning their application.

The underbody should be washed following the end of the cold weather season to remove any dirt adhering to the underbody, since this may also contain salt.

ROOF, PAINT POLISHING, WHEELS AND TYRES

Convertible roof

The function, appearance and life of the folding convertible top depends to a large extent on correct operation and care.

Wash the top with car shampoo and a soft brush. Do not use any aggressive cleaners. If the vehicle is exposed to an exceptionally high degree of dirtying, it must be washed more frequently to prevent the dirt from clogging the pores of the folding top.

Coat all seals, such as the roof and the windscreen frame, with silicone oil from time to time. A constant close contact between the fine rubber lips and the sealing faces ensures a tight fit and low closing forces.

Do not wash the vehicle in automatic car washes.

Do not open the folding top if it is wet, dirty or iced up.

Polishing

Under normal circumstances the paint does not need polishing to retain its shine. A weekly wash is sufficient. However, the use of a Polymer Glaze about every 3 months will reduce the effects of road bloom by removing natural contaminants which can build up on the paint.

Note: Do not attempt to apply a polish without first washing to remove loose grit, surface dirt, dust or grease etc.

Tyres

Sponging with cold water is all that is necessary for normal cleaning. Oil and grease should be removed with soap and water or detergent. For tar or other substances, a mild abrasive, such as mechanic's hand soap or kitchen cleaning powder, may be used if necessary. Thoroughly wash the tyres with water to finish. Petrol must not be used for cleaning tyres.

New tyre look can be restored using Holden Tyre and Bumper Shine.

Alloy wheels

To preserve the original appearance of alloy wheels, keep them clean and free from build up of road dirt. Holden Wheel Cleaner can be used for cleaning alloy wheels. Do not use abrasive cleaners on alloy wheels.

EXTERIOR GLASS CLEANING

Glass cleaning – general

Special care should be taken to avoid scratching the glass. If it is cleaned at the same time as the rest of the vehicle, there is a possibility that particles of grit will cause fine scratches. Flush off any mud on the glass when washing the body, but leave the final cleaning and polishing until afterwards. Use Holden Glass Cleaner and wash each section of glass in turn, making sure that the water, its container and the sponge are quite clean and free from grit. Clean old linen cloth is better than new material for polishing glass.

Windscreen

It is important that the windscreen be kept clean so that the wiper blades may be as effective as possible. Old wiper blades can cause windscreen scratching and so should be regularly inspected and replaced.

Abrasive cleaners should never be used to clean glass as they can cause scratches, impairing night vision. After the windscreen has been cleaned with a wet sponge it should be wiped over with a soft, lint free cloth or chamois.

It is recommended that Holden Optikleen be added to the windscreen washer reservoir.

Wiper blades

Oil and road scum thrown up on the windscreen will cause smearing when the wipers are switched on, when the dirt is transferred onto the wiper blades. Many owners, while they methodically clean the windscreen glass, omit to clean the wiper blades and consequently smearing of the glass reappears immediately the wiper blades are used. The blades can be cleaned by lifting them off the windscreen and cleaning with Holden Optikleen and a clean cloth.

Note: Do not operate the wiper blades by hand as this may damage the wiper drive mechanism.

If the wiper blades are used to clean dust and dirt from the windscreen in dry conditions always use the washer system first to wet the windscreen. Ensure that the windscreen washer reservoir is not empty.

Should the wiper blades be frozen to the windscreen, they must be lifted off and freed by hand before switching on the wipers.

CLEANING PRODUCTS

PART NUMBER	SIZE	DESCRIPTION	USAGE
92145132	237 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145418	437 ml	Quick and Easy Speed Finish	Seals in a deep, lustrous glazed finish. Long life protection from oxidation, salt and weather damage.
92145130	237 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets, etc.
92145416	437 ml	All Purpose Cleaner	Cleans and deodorises velour, most vinyl upholstery, hood linings, mats and carpets, etc.
92145133	237 ml	Glass Cleaner	Cleans all glass surfaces.
92145419	437 ml	Glass Cleaner	Cleans all glass surfaces.
92140005	500 ml	Optikleen	Windscreen washer solvent.
92140004	5 ml	Optikleen Sachet	Windscreen washer solvent; 1 sachett per washer bottle refill.
92145129	237 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145415	437 ml	Hi Suds Car Wash	Cleans vehicle exterior.
92145131	237 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145417	437 ml	Vinyl and Trim Dressing	Seals and protects vinyl upholstery and plastic trim.
92145140	120 ml	Leather Revitaliser	Revitalises the leather upholstery.
92145141	120 ml	Leather Cleaner	Cleans the leather upholstery.
92145142	120 ml	Leather Protector	Protects the leather upholstery.
92145143	1 Kit	Leather Care Kit	Contains leather revitaliser, cleaner and protector.
92145135		Chamois	Cloth for wiping off excess water from the vehicle's exterior after washing and rinsing.
92145134		Handle Grip Sponge	Sponge for washing the vehicle.
92145136		Microfibre Glass Cleaning Cloth	Cloth for cleaning all glass surfaces.
92145137		Microfibe General Purpose Cleaning / Polishing Cloth	Cloth for general purpose cleaning / polishing.

CHAPTER 12

Servicing

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12-2 Service intervals
12-3 Service light
12-4 Additional service requirements
12-6 Maintenance schedule
12-8 Service times
12-9 Service coupons

SERVICE INTERVALS

When it comes to service, remember that your Holden Retailer has the trained personnel and specialised equipment to correctly service your vehicle. Your Retailer invites you to return for all your service needs both during and after the warranty period.

The safety, economy, emission control, performance and reliability of your vehicle cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians at Holden Retailers.

Therefore, it is in the owner's interest that the following services are performed at the specified Distance or Months (whichever occurs first).

1,500 km - 1 month inspection
15,000 km - 1 year
30,000 km - 2 years
45,000 km - 3 years
60,000 km - 4 years
75,000 km - 5 years
90,000 km - 6 years
105,000 km - 7 years
120,000 km - 8 years
135,000 km - 9 years
150,000 km - 10 years
165,000 km - 11 years
180,000 km - 12 years

The one month (1,500 kilometres) inspection will be performed without cost for labour by the Selling Retailer.

This service may be carried out by another Holden Retailer provided you have a letter of Introduction from the Selling Retailer.

Your Retailer will supply the necessary letter of Introduction upon request.

The services shown in this schedule between 15,000 km and 180,000 km are to be performed after 180,000 km at the same intervals.

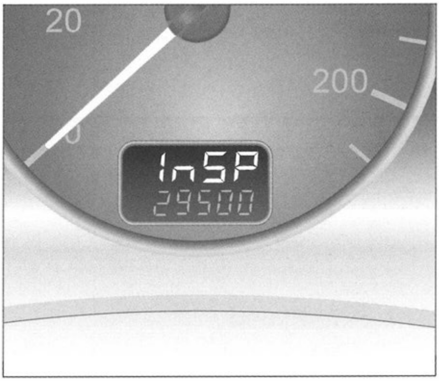
Note: All maintenance services as listed in this Handbook and replacement of service items are the responsibility of the owner and as such are NOT considered, under the provisions of the New Vehicle Warranty to be rectification of defective material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transmission, clutch, parking brake, etc. or any other items which may require servicing due to fair wear and tear will be carried out at the owner's cost.

Damage caused by failure to have proper maintenance services carried out by an authorised Holden Retailer or authorised Service Outlet, or in accordance with Holden's specifications, may void your New Vehicle Warranty. It is strongly recommended that you read the 'New Vehicle Warranty' in Chapter 9 so that you are aware of your Warranty exclusions.

Service coupons are provided further on in this chapter. When each service is performed the coupon is removed so that the following service coupon is readily visible to remind you when the next service is due.

After the service is completed, the owner should check that the service has been validated, by the Retailer stamping and signing the coupon stub. This is important as it will not only assist in the determination of Warranty Claims, but will enhance the value of the vehicle when selling.

SERVICE LIGHT



A small window in the speedometer is used for the odometer, tripmeter and the service reminder.

The service reminder will show 'InSP' (inspection required) for a few seconds when the ignition is turned ON if the vehicle is within 500 km or one week of the next service.

Note: The service reminder light is not designed to show for the first, 1,500 km / 1 month service.

When the vehicle is taken in for service, your Retailer will reset the reminder.

The service reminder can also be reset by the driver as follows:

- Ignition off.
- Press and hold down the reset button while turning on the ignition. Keep the reset button held down (for approx. 2 more seconds) until the flashing 'InSP' display changes to ' - - - - '.
- Release the reset button.
- The odometer and tripmeter will then re-appear.

ADDITIONAL SERVICE REQUIREMENTS

The Maintenance Schedule on pages 6 to 7 show the service items for standard driving requirements. Additional service items are required when driving under certain conditions, such as when towing. The additional services are required while your vehicle is driven under any of the conditions listed below.

If you operate under any of these conditions on a one off basis, for example on a holiday trip, then an extra service should be for that time only. As a guide, if you operate continually for a period of one month or 1,000 km under this condition, then this could require additional services.

If you consider that further servicing is required, due to the type of driving or before a long trip, please discuss the situation with the service manager of your Holden Retailer.

The conditions:

A = Stop-start driving, excessive idling or low speed operation as experienced in inner city driving e.g. taxi, police, door-to-door delivery.

B = Caravan or trailer towing, extended periods with heavy loads or high speed operation in temperatures above 35°C.

C = Extreme climates, such as high air pollution, air borne sand, dust, high altitude or major fluctuations in temperature.

Change automatic transmission fluid @ 60,000 km or 4 years (whichever comes first)	A	B	C
Replace engine oil and filter @ 5,000 km or 3 months (whichever comes first)			A
Air cleaner element – replace @ 30,000 km or 2 years (whichever comes first)		C	
Pollen filter – replace @ 15,000 km or 1 year (whichever comes first)	C		
Fuel filter – replace @ 30,000 km or 2 years (whichever comes first)	C		

ADDITIONAL SERVICE REQUIREMENTS cont.

SPECIAL SERVICE FOR EXTREME
OPERATING CONDITIONS

Date .... km ....
Items performed: ....
....
....
....
Servicing
Retailer ....

SPECIAL SERVICE FOR EXTREME
OPERATING CONDITIONS

Date .... km ....
Items performed: ....
....
....
....
Servicing
Retailer ....

SPECIAL SERVICE FOR EXTREME
OPERATING CONDITIONS

Date .... km ....
Items performed: ....
....
....
....
Servicing
Retailer ....

SPECIAL SERVICE FOR EXTREME
OPERATING CONDITIONS

Date .... km ....
Items performed: ....
....
....
....
Servicing
Retailer ....

SPECIAL SERVICE FOR EXTREME
OPERATING CONDITIONS

Date .... km ....
Items performed: ....
....
....
....
Servicing
Retailer ....

SPECIAL SERVICE FOR EXTREME
OPERATING CONDITIONS

Date .... km ....
Items performed: ....
....
....
....
Servicing
Retailer ....

MAINTENANCE SCHEDULE

Use odometer reading or years, whichever occurs first	x 1,000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
COOLANT - check level, check coolant %		1/12	1	2	3	4		6	7	8	9		11	12
COOLANT - replace							5					10		
DRIVE BELTS - check			1	2	3	4	5	6	7	8	9	10	11	12
1.8L and 2.0L engine only: ENGINE TOOTHED BELT and TENSIONER ASSEMBLY - replace						4				8				12
1.8L and 2.0L engines only: IDLER PULLEYS - inspect						4								12
1.8L and 2.0L engines only: IDLER PULLEYS - replace										8				
AIR CLEANER paper element - replace						4				8				12
1.8L and 2.0L engines only: SPARK PLUGS - replace						4				8				12
2.0L engine only: SPARK PLUGS - replace				2		4		6		8		10		12
FUEL FILTER - replace						4				8				12
ENGINE OIL AND FILTER - replace			1	2	3	4	5	6	7	8	9	10	11	12
POWER STEERING - check level		1/12	1	2	3	4	5	6	7	8	9	10	11	12
AUTO TRANS - check fluid level				2		4		6		8		10		12
AUTO TRANS - fluid change		Not changed for life of vehicle unless operating in extreme conditions												
LEAKAGE - visual check of engine and transmission		1/12	1	2	3	4	5	6	7	8	9	10	11	12
LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS - check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
WINDSCREEN WIPE / WASH system check fluid level and blade condition		1/12	1	2	3	4	5	6	7	8	9	10	11	12
DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES - lubricate			1	2	3	4	5	6	7	8	9	10	11	12
HEADLIGHT ADJUSTMENT - check			1	2	3	4	5	6	7	8	9	10	11	12
BODY / UNDERBODY - check corrosion protection		1/12	1	2	3	4	5	6	7	8	9	10	11	12

MAINTENANCE SCHEDULE

Use odometer reading or years, whichever occurs first	x 1,000 km	1.5	15	30	45	60	75	90	105	120	135	150	165	180
	or years	1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE ITEMS														
FRONT AND REAR BRAKES - check pad thickness			1	2	3	4	5	6	7	8	9	10	11	12
BRAKES, PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION - visual check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
RUBBER BOOTS - check		1/12	1	2	3	4	5	6	7	8	9	10	11	12
WHEELS - check wheel nut torque, tyre condition and tyre pressure		1/12	1	2	3	4	5	6	7	8	9	10	11	12
BRAKE / CLUTCH FLUID - change		Change every 2 years (regardless of km)												
POLLEN FILTER (if fitted) - replace				2		4		6		8		10		12
BRAKE FLUID LEVEL - check			1	2	3	4	5	6	7	8	9	10	11	12
(except Convertible models) REMOTE CONTROL BATTERY - replace				2		4		6		8		10		12
(Convertible models) REMOTE CONTROL BATTERY - replace			1	2	3	4	5	6	7	8	9	10	11	12
ROAD TEST and reset service due light		1/12	1	2	3	4	5	6	7	8	9	10	11	12
CHECK CONTROL		1/12	1	2	3	4	5	6	7	8	9	10	11	12
SERVICE LABOUR TIMES														
1.8 litre engine		-	1.1	1.6	1.5	3.3	1.8	1.6	1.5	3.3	1.5	1.9	1.5	3.3
2.0 litre engine		-	1.1	1.8	1.5	3.1	1.8	1.8	1.5	3.1	1.5	2.1	1.5	3.1
2.2 litre engine		-	1.1	1.6	1.5	1.7	1.8	1.6	1.5	1.7	1.5	1.9	1.5	1.7

SERVICE TIMES

In addition to labour times listed previously, the following operations will be charged for, when required, on a time only basis:

Brake and clutch fluid must be changed every two years (add 0.2 hours for fluid change).

The owner will be charged for all lubricants and materials used plus labour at the times recommended on the coupon.

The repair or replacement of any part found faulty during a service check and not covered by Holden Warranty will be added to the charges.

Where any deficiencies are noted, such items should be reported to the owner/operator so that the extra work required can be authorised.

The use of break-in oil, tune up compounds, friction reducing compounds and other supplemental additives are not recommended; their use will not only increase operating costs, but may indeed be harmful to your vehicle.

1,500km or 1 month INSPECTION

Holden invites the new owner of this car to return to the selling Retailer for a free service inspection at 1,500 km.

Owner's Name Mr.
Mrs. ....
Miss.
Other...........

Address ....
Town ....
State .... Postcode ....
Reg. no. .... Engine no ....
I.S.O.V.I.N. .... Model ....
Odometer reading .... Date of Acquisition ....
Selling Retailer's Stamp & Signature ....

This car has been thoroughly checked in accordance with the items on the reverse side of this voucher.

This inspection is provided free of charge.

Servicing Retailer's Stamp & Signature

Servicing Retailer ....
Town .... State ....

Owner's signature ....

1,500 km or 1 month Inspection Validation

This car has been thoroughly checked in accordance with the 1,500 km/one month inspection.

Retailer ....
Service Manager's signature ....
Date .... Odometer reading ....

☐ COOLANT – check fluid level, check coolant %

☐ POWER STEERING – check fluid level

☐ LEAKAGE – visual check of engine and transmission

☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check

☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition

☐ BODY / UNDERBODY – check corrosion protection

☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check

☐ RUBBER BOOTS – check

☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure

☐ ROAD TEST and reset service due light

☐ CHECK CONTROL

15,000 km or 1 year

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.1 hours

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

15,000 km or 1 year Service Validation

Servicing Retailer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

☐ COOLANT – check level, check coolant %

☐ DRIVE BELTS – check

☐ ENGINE OIL AND FILTER – replace

☐ POWER STEERING – check level

☐ LEAKAGE – visual check of engine and transmission

☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check

☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition

☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate

☐ HEADLIGHT ADJUSTMENT – check

☐ BODY / UNDERBODY – check corrosion protection

☐ BRAKES – check pad thickness

☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check

☐ RUBBER BOOTS – check

☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure

☐ BRAKE FLUID LEVEL – check

☐ CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace

☐ ROAD TEST and reset service due light

☐ CHECK CONTROL

30,000 km or 2 years

SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.6 hours labour (1.8 litre engine)
- 1.8 hours labour (2.0 litre engine)
- 1.6 hours labour (2.2 litre engine)
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

30,000 km or 2 year Service Validation

Servicing Retailer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

- ☐ COOLANT – check level, check coolant %
- ☐ DRIVE BELTS – check
- ☐ SPARK PLUGS (2.0L engine only) – replace
- ☐ ENGINE OIL AND FILTER – replace
- ☐ POWER STEERING – check level
- ☐ AUTO TRANS – check fluid level
- ☐ LEAKAGE – visual check of engine and transmission
- ☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check
- ☐ WINDSCREEN WIPE / WASH system - check fluid level and blade condition
- ☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate
- ☐ HEADLIGHT ADJUSTMENT – check
- ☐ BODY / UNDERBODY – check corrosion protection
- ☐ BRAKES – check pad thickness
- ☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check
- ☐ RUBBER BOOTS – check
- ☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure
- ☐ POLLEN FILTER (if fitted) – replace
- ☐ BRAKE FLUID LEVEL – check
- ☐ REMOTE CONTROL BATTERY – replace
- ☐ ROAD TEST and reset service due light
- ☐ CHECK CONTROL

- ☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

45,000 km or
3 years
Service
Validation

Servicing Retailer.................................
Brake fluid changed: YES/NO....................
Date of Service.....................................
Odometer ....
Signed...

Additional services performed: ....
....
....
....
....

45,000 km or 3 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.5 hours labour
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

☐ COOLANT – check level, check coolant %

☐ DRIVE BELTS – check

☐ ENGINE OIL AND FILTER – replace

☐ POWER STEERING – check level

☐ LEAKAGE – visual check of engine and transmission

☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check

☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition

☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate

☐ HEADLIGHT ADJUSTMENT – check

☐ BODY / UNDERBODY – check corrosion protection

☐ BRAKES – check pad thickness

☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check

☐ RUBBER BOOTS – check

☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure

☐ BRAKE FLUID LEVEL – check

☐ CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace

☐ ROAD TEST and reset service due light

☐ CHECK CONTROL

☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

60,000 km or 4 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 3.3 hours labour (1.8 litre engine)
- 3.1 hours labour (2.0 litre engine)
- 1.7 hours labour (2.2 litre engine)
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

60,000 km or 4 years Service Validation

Servicing Retailer ....

Brake fluid changed: YES/NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

- ☐ COOLANT – check level, check coolant %
- ☐ DRIVE BELTS – check
- ☐ (1.8 litre and 2.0 litre engine) ENGINE TOOTHED BELT and TENSIONER ASSEMBLY – replace
- ☐ (1.8 litre and 2.0 litre engine) IDLER PULLEYS – inspect
- ☐ AIR CLEANER paper element – replace
- ☐ SPARK PLUGS – replace
- ☐ FUEL FILTER – replace
- ☐ ENGINE OIL AND FILTER – replace
- ☐ POWER STEERING – check level
- ☐ AUTO TRANS – check fluid level
- ☐ LEAKAGE – visual check of engine and transmission
- ☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check
- ☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition
- ☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate
- ☐ HEADLIGHT ADJUSTMENT – check
- ☐ BODY / UNDERBODY – check corrosion protection
- ☐ BRAKES – check pad thickness
- ☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check
- ☐ RUBBER BOOTS – check
- ☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure
- ☐ POLLEN FILTER (if fitted) – replace
- ☐ BRAKE FLUID LEVEL – check
- ☐ REMOTE CONTROL BATTERY – replace
- ☐ ROAD TEST and reset service due lightAND RESET SERVICE DUE LIGHT
- ☐ CHECK CONTROL

- ☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

75,000 km or 5 years Service Validation

Servicing Retailer ....

Brake fluid changed: YES/NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

75,000 km or 5 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.8 hours labour
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ COOLANT – replace

☐ DRIVE BELTS – check

☐ ENGINE OIL AND FILTER – replace

☐ POWER STEERING – check level

☐ LEAKAGE – visual check of engine and transmission

☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check

☐ WINDSCREEN WIPE / WASH system - check fluid level and blade condition

☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate

☐ HEADLIGHT ADJUSTMENT – check

☐ BODY / UNDERBODY – check corrosion protection

☐ BRAKES – check pad thickness

☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check

☐ RUBBER BOOTS – check

☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure

☐ BRAKE FLUID LEVEL – check

☐ CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace

☐ ROAD TEST and reset service due light

☐ CHECK CONTROL

☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

90,000 km or 6 years Service Validation

Servicing Retailer ....

Brake fluid changed: YES/NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

90,000 km or 6 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.6 hours labour (1.8 litre engine)
- 1.8 hours labour (2.0 litre engine)
- 1.6 hours labour (2.2 litre engine)
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ COOLANT – check level, check coolant %

☐ DRIVE BELTS – check

☐ SPARK PLUGS (2.0L engine only) – replace

☐ ENGINE OIL AND FILTER – replace

☐ POWER STEERING – check level

☐ AUTO TRANS – check fluid level

☐ LEAKAGE – visual check of engine and transmission

☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check

☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition

☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate

☐ HEADLIGHT ADJUSTMENT – check

☐ BODY / UNDERBODY – check corrosion protection

☐ BRAKES – check pad thickness

☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check

☐ RUBBER BOOTS – check

☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure

☐ POLLEN FILTER (if fitted) – replace

☐ BRAKE FLUID LEVEL – check

☐ REMOTE CONTROL BATTERY – replace

☐ ROAD TEST and reset service due light

☐ CHECK CONTROL

☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

105,000 km or 7 years Service Validation

Servicing Retailer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

105,000 km
or
7 years
SERVICE
COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.5 hours labour
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

☐ COOLANT – check level, check coolant %

☐ DRIVE BELTS – check

☐ ENGINE OIL AND FILTER – replace

☐ POWER STEERING – check level

☐ LEAKAGE – visual check of engine and transmission

☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check

☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition

☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate

☐ HEADLIGHT ADJUSTMENT – check

☐ BODY / UNDERBODY – check corrosion protection

☐ BRAKES – check pad thickness

☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check

☐ RUBBER BOOTS – check

☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure

☐ BRAKE FLUID LEVEL – check

☐ CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace

☐ ROAD TEST and reset service due light

☐ CHECK CONTROL

☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

120,000 km or 8 years Service Validation

Servicing Retailer ....

Brake fluid changed: YES/NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

120,000 km or 8 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 3.3 hours labour (1.8 litre engine)
- 3.1 hours labour (2.0 litre engine)
- 1.7 hours labour (2.2 litre engine)
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

☐ COOLANT – check level, check coolant %
☐ DRIVE BELTS – check
☐ (1.8 litre and 2.0 litre engine) ENGINE TOOTHED BELT, TENSIONER ASSEMBLY – replace
☐ (1.8 litre and 2.0 litre engine) IDLER PULLEYS – replace
☐ AIR CLEANER paper element – replace
☐ SPARK PLUGS – replace
☐ FUEL FILTER – replace
☐ ENGINE OIL AND FILTER – replace
☐ POWER STEERING – check level
☐ AUTO TRANS – check fluid level
☐ LEAKAGE – visual check of engine and transmission
☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check
☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition
☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate
☐ HEADLIGHT ADJUSTMENT – check
☐ BODY / UNDERBODY – check corrosion protection
☐ BRAKES – check pad thickness
☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check
☐ RUBBER BOOTS – check
☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure
☐ POLLEN FILTER (if fitted) – replace
☐ BRAKE FLUID LEVEL – check
☐ REMOTE CONTROL BATTERY – replace
☐ ROAD TEST and reset service due light
☐ CHECK CONTROL

☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

135,000 km or
9 years
Service
Validation

Servicing Retailer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

135,000 km or 9 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.5 hours labour
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

☐ COOLANT – check level, check coolant %

☐ DRIVE BELTS – check

☐ ENGINE OIL AND FILTER – replace

☐ POWER STEERING – check level

☐ LEAKAGE – visual check of engine and transmission

☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check

☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition

☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate

☐ HEADLIGHT ADJUSTMENT – check

☐ BODY / UNDERBODY – check corrosion protection

☐ BRAKES – check pad thickness

☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check

☐ RUBBER BOOTS – check

☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure

☐ BRAKE FLUID LEVEL – check

☐ CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace

☐ ROAD TEST and reset service due light

☐ CHECK CONTROL

☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

150,000 km or 10 years Service Validation

Servicing Retailer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

150,000 km or 10 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.9 hours labour (1.8 litre engine)
- 2.1 hours labour (2.0 litre engine)
- 1.9 hours labour (2.2 litre engine)
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....
....
....

Signature ....

Date ....

- ☐ COOLANT – replace
- ☐ DRIVE BELTS – check
- ☐ SPARK PLUGS (2.0L engine only) – replace
- ☐ ENGINE OIL AND FILTER – replace
- ☐ POWER STEERING – check level
- ☐ AUTO TRANS – check fluid level
- ☐ LEAKAGE – visual check of engine and transmission
- ☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check
- ☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition
- ☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate
- ☐ HEADLIGHT ADJUSTMENT – check
- ☐ BODY / UNDERBODY – check corrosion protection
- ☐ BRAKES – check pad thickness
- ☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check
- ☐ RUBBER BOOTS – check
- ☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure
- ☐ POLLEN FILTER (if fitted) – replace
- ☐ BRAKE FLUID LEVEL – check
- ☐ REMOTE CONTROL BATTERY – replace
- ☐ ROAD TEST and reset service due light
- ☐ CHECK CONTROL

- ☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

165,000 km or 11 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 1.5 hours labour
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

165,000 km or 11 years Service Validation

Servicing Retailer ....

Brake fluid changed: YES/NO

Date of Service ....

Odometer ....

Signed ....

Additional services performed: ....

....

....

....

....

☐ COOLANT – check level, check coolant %

☐ DRIVE BELTS – check

☐ ENGINE OIL AND FILTER – replace

☐ POWER STEERING – check level

☐ LEAKAGE – visual check of engine and transmission

☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check

☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition

☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate

☐ HEADLIGHT ADJUSTMENT – check

☐ BODY / UNDERBODY – check corrosion protection

☐ BRAKES – check pad thickness

☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check

☐ RUBBER BOOTS – check

☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure

☐ BRAKE FLUID LEVEL – check

☐ CONVERTIBLE ONLY : REMOTE CONTROL BATTERY – replace

☐ ROAD TEST and reset service due light

☐ CHECK CONTROL

☐ BRAKE AND CLUTCH FLUID – Change every 2 years (regardless of km)

180,000 km or 12 years SERVICE COUPON

I authorise performance of the services specified on the rear of this coupon.

I understand I will be charged for the following hours of labour:

- 3.3 hours labour (1.8 litre engine)
- 3.1 hours labour (2.0 litre engine)
- 1.7 hours labour (2.2 litre engine)
- add 0.2 hours if brake/clutch fluid changed

Also, that there will be a charge for all lubricants, filters and parts used as a result of checks and additional services performed as requested.

There will also be a charge for additional services as requested:

....

....

....

Signature ....

Date ....

180,000 km or 12 years Service Validation

Servicing Retailer ....
Brake fluid changed: YES/NO
Date of Service ....
Odometer ....
Signed ....

Additional services performed: ....
....
....
....
....

- ☐ COOLANT – check level, check coolant %
- ☐ DRIVE BELTS – check
- ☐ (1.8 litre and 2.0 litre engine) ENGINE TOOTHED BELT and TENSIONER ASSEMBLY – replace
- ☐ (1.8 litre and 2.0 litre engine) IDLER PULLEYS – inspect
- ☐ AIR CLEANER paper element – replace
- ☐ SPARK PLUGS – replace
- ☐ FUEL FILTER – replace
- ☐ ENGINE OIL AND FILTER – replace
- ☐ POWER STEERING – check level
- ☐ AUTO TRANS – check fluid level
- ☐ LEAKAGE – visual check of engine and transmission
- ☐ LIGHTS, MONITORING, SIGNAL EQUIPMENT, PARK BRAKE ADJUSTMENT AND AIRBAGS – check
- ☐ WINDSCREEN WIPE / WASH system – check fluid level and blade condition
- ☐ DOOR HINGES, DOOR STOP, BONNET LOCK, TAILGATE HINGES – lubricate
- ☐ HEADLIGHT ADJUSTMENT – check
- ☐ BODY / UNDERBODY – check corrosion protection
- ☐ BRAKES – check pad thickness
- ☐ BRAKE PIPES, BRAKE PRESSURE HOSES, FUEL LINES, EXHAUST AND SUSPENSION – visual check
- ☐ RUBBER BOOTS – check
- ☐ WHEELS – check wheel nut torque, tyre condition and tyre pressure
- ☐ POLLEN FILTER (if fitted) – replace
- ☐ BRAKE FLUID LEVEL – check
- ☐ REMOTE CONTROL BATTERY – replace
- ☐ ROAD TEST and reset service due light
- ☐ CHECK CONTROL

- ☐ BRAKE AND CLUTCH FLUID – change every 2 years (regardless of km)

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